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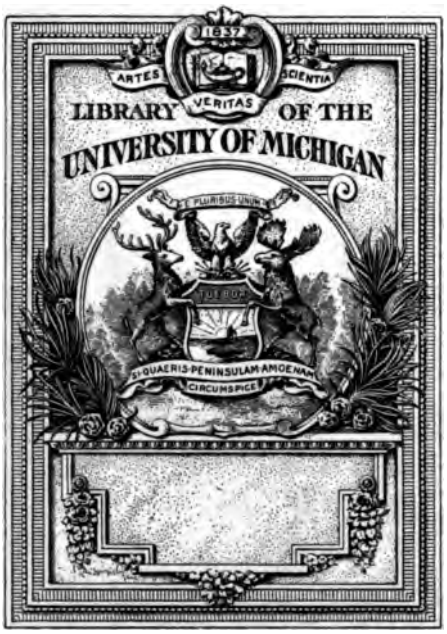

THE GIFT OF
Supt. Pub. Doc.

60th Cong 1st sess H. Doc v. 52. 5321

REPORTS

OF THE

DEPARTMENT OF COMMERCE AND LABOR

1907

REPORT OF THE SECRETARY OF COMMERCE AND LABOR

AND

REPORTS OF BUREAUS

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CONTENTS.

REPORT OF THE SECRETARY OF COMMERCE AND LABOR.

	Page.
Introduction	5
Immigration and naturalization	7
Immigration	7
Distribution of immigrants	9
Enlarging and improving immigration stations	10
Exclusions and rejections	10
U. S. doctrine of expatriation	11
Contract labor	12
Chinese immigration	15
Insular and mainland immigration contrasted	19
Naturalization	21
Bureau of Corporations	22
Bureau of Labor	25
Investigation of woman and child labor	25
Mediation under the Erdman Act	26
Strike of telegraphers	27
Publications	28
Bureau of Statistics	30
Increase in imports and exports	30
Effect of increased prices on imports and exports	31
Activity of internal commerce	32
Trade with noncontiguous territories	33
Bureau of Manufactures	33
Investigations of markets for cotton goods and cotton-seed oil products	33
Cooperation between the Department and trade bodies	34
Information regarding foreign tariffs	35
Foreign trade opportunities	35
Bureau of the Census	36
Bureau of Navigation	38
Steamboat-Inspection Service	43
Light-House Board	45
Bureau of Fisheries	47
Propagation and distribution of food fishes	47
Biological inquiries	49
Alaska salmon fisheries	50
International relations	51
New building and public aquarium	51
Alaskan fur-seal service	52
Coast and Geodetic Survey	53
Bureau of Standards	55

205192

Page.
Office of the Secretary 59
Appointment Division 59
Appropriations and disbursements 60
Division of Printing 65
Committee on statistical reorganization 67
Building for the Department 68
Conclusion 70

REPORTS OF BUREAUS.

Bureau of Immigration and Naturalization 75
Bureau of Corporations 207
Bureau of Labor 213
Bureau of Statistics 231
Bureau of Manufactures 241
Bureau of the Census 261
Bureau of Navigation 283
Steamboat-Inspection Service 311
Light-House Board 463
Bureau of Fisheries 631
Coast and Geodetic Survey 647
Bureau of Standards 657

INDEX 675

REPORT

OF THE

SECRETARY OF COMMERCE AND LABOR

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OF THE

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The previous law and the administration thereof, probably due to oversight, made no provision for the exemption of diplomatic and consular officers and other officials duly accredited by their governments, together with their suites, coming to this country, from the requirements of that law. Some of these officials very properly objected and felt irritated because they were subjected, by the masters or commanding officers of steamers on which they arrived, to questions that aliens are required under the regulations to answer in order to complete the ships' manifests. Accordingly, on January 11 and February 4, 1907, I issued orders exempting the officials in question from such regulations. Such exemptions have since been incorporated in the new law (section 41).

The total number of aliens admitted during the year was 1,285,349, which exceeded that for the fiscal year 1906 by 184,614, and that for the fiscal year 1905 by 258,850, being increases of 17 and 25 per cent, respectively. During the year 13,064 aliens were rejected, an increase over the rejections for the fiscal year 1906 of 632. The total number seeking admission in 1907, therefore, was 1,298,413, an increase over the total number applying in 1906 of 185,246.

A notable feature of the immigration consists in the fact that of the aliens admitted, 1,100,771 ranged in age from 14 to 44 years, and 138,344 were less than 14 years of age, leaving only 46,234 who had reached or passed the age of 45. As to literacy, it is shown that 343,402, or 30 per cent of the total number of aliens admitted, were illiterate. Concerning the financial condition of the immigrants, 873,923 exhibited less than $50 each—how much more they had it is impossible to state—while 107,502 showed amounts in excess of that sum; and the total amount of money which was exhibited by arriving aliens, and brought into the country, was $25,599,893, an average of almost $20 per person. There has been a considerable increase in the number of persons rejected because of insanity, contagious diseases, and convictions for crime. The hospitals of this country afforded relief during the year to 11,528 aliens, and warrants of deportation were executed in the cases of 995 on the ground of unlawful residence or because of having become public charges, and for other causes, a hearing having been granted in each case. The total number of aliens actually returned to the countries whence they came, therefore (13,064 plus 995), was 14,059, which, compared with the total number returned during the year 1906 (12,432 plus 676), 13,108, shows an increase of 951, or over 7 per cent.

In order to ascertain the net increase of our population from year to year by immigration it is necessary to deduct from the figures above given the number of aliens who have departed from the United States during the fiscal year, as well as the number deported and the number of naturalized citizens who permanently left

the country during the same period. It is estimated that about 310,000 aliens departed from the United States during the fiscal year, of which number probably 100,000 were of the nonimmigrant alien class, thus reducing the immigration for the year to about 1,075,000. From these figures is further to be deducted the number of naturalized citizens who during the year have permanently left the country, as well as the number who have been deported. We have no figures which will enable us with any degree of definiteness to ascertain the number of returning aliens. The new law, however, contains provisions for ascertaining these figures, so that for the next year we will have reliable data as to the number of outgoing aliens, but not as to the number of naturalized aliens who leave the country to live permanently abroad. The only data we have are the reports furnished the Bureau by the Trans-Atlantic Passenger Conference. From their compilation for the year ended June 30, 1907, we get the following figures of the passengers who left the port of New York, which may be of interest: First cabin, 95,681; second cabin, 97,532; steerage, 340,375; a total of 533,588. Of the 340,375 outgoing steerage passengers, how many permanently remain abroad and how many return to this country, and of course are again enumerated as arriving aliens, we are unable from present data to form an estimate.

DISTRIBUTION OF IMMIGRANTS.

The considerable increase of immigration for recent years is due to causes external as well as internal. The rapidity of communication and the cheapness of passenger traffic have made it much easier, especially for the laboring classes, to migrate, and the result is seen not only in our immigration, but to a much larger relative extent in the immigration into Canada and into other countries on this continent, particularly Brazil, Mexico, and Argentina. The external impelling causes are religious oppressions and economic pressure, and the internal causes are commercial prosperity and the opportunities and advantages that are afforded for better conditions in our free and democratic country. By examining the illuminating statistical tables in the Commissioner-General's report it will be seen that our immigration is an index of our prosperity.

The main objection to the greatly increased immigration during the past decade is because of the congestion and the consequent evils caused thereby in our larger Atlantic seaport cities. Congress, doubtless in recognition of this fact, made provision in the new act (section 40) for a Division of Information, which might more accurately be designated a "Division of Information and Distribution." I desire to direct special attention to that part of the report of the Commissioner-General of Immigration dealing with this subject. It is hoped that this division will materially aid in directing immigrants to those

sections of our country—the South, the Southwest, and the West—which have need for the right kind of immigration, especially in agricultural and manufacturing pursuits. If a proper distribution can be effected, it will relieve the congestion on our eastern seaboard that so large an immigration naturally produces and be of decided benefit to those sections of the country where there is a great shortage of labor. The appropriations made by the last Congress authorized the construction of stations for the accommodation of arriving aliens at New Orleans, Galveston, and Charleston, which, when completed, will have considerable effect in inducing steamship companies carrying aliens to land their passengers at these stations and aid generally in promoting distribution.

ENLARGING AND IMPROVING IMMIGRATION STATIONS.

I indorse the recommendations made by the Commissioner-General for enlarging and improving the immigration stations at Ellis Island and other points on the Atlantic seaboard. There is every reason why our immigration stations should be fully provided with accommodations that will make them ample, comfortable, and sanitary, especially as under the law the entire cost of the administration of the service is taken from the immigrant fund, which at the end of the present fiscal year left a balance, as shown in the annual report of the Commissioner-General of Immigration, of $3,079,515.26. From this amount, however, should be deducted the sum of $1,190,304.84, which has been appropriated for the construction of buildings at Ellis Island, San Francisco, New Orleans, Galveston, and Charleston. Under the present law, which increases the head tax from $2 to $4, the annual surplus from this source, on the basis of the present immigration, will be doubled; and even if the immigration falls off considerably, this amount will be largely increased.

EXCLUSIONS AND REJECTIONS.

During the fiscal year 13,064 aliens were rejected; this, however, is no index of the number that has been deterred from coming here by reason of the strict exclusion provisions of our laws. The commissioner of immigration at New York, in his report, which is made a part of the report of the Commissioner-General, states:

> The steamship companies have continued to follow much the same course as has characterized their policy of former years, with the single exception of the increased attention they have given at ports of embarkation to persons afflicted with diseases that are liable to subject them to the payment of fines. That they have been thus vigilant is attested by the fact that of the total number of persons afflicted with contagious diseases only 251 were so afflicted as to enable the medical examiners to certify that said disease might have been detected at ports of embarkation, and this view is further supported by the total list of passengers rejected at ports of embarkation, which is in excess of

65,000. Two hundred and fifty-one cases out of more than a million of passengers—making due allowances for disagreements of diagnoses—certainly indicate that special attention has been given to this feature, and this emphasizes the wisdom of the act of March 3, 1903, which imposes a penalty of $100 for each case of contagious disease.

U. S. DOCTRINE OF EXPATRIATION.

The Commissioner-General and others, due in part, perhaps, to the fact of their being impressed with the tragedies and hardships rejection imposes upon arriving immigrants, have recommended that it would be much better if some of our immigration officers were stationed at the principal seaports in foreign countries, where immigrants could be examined and their admission and rejection finally passed upon. I have given this subject careful and deliberate consideration. In the first place, this could not be done without the consent of such foreign governments, and it is not reasonable to suppose that such consent would be given without our granting to them the right to station their officers at our seaports to determine which of our citizens would be permitted to leave the United States and visit or emigrate to their countries. For us to consent to any such proposition would involve the abandonment of a national policy to which we have consistently adhered from the beginning of our Government until the present time, namely, the right of expatriation, which was the principal cause of our war with Great Britain in 1812, and which, after many years of agitation, was strenuously upheld by the Department of State and through our diplomacy. That policy was finally and emphatically enacted into express law (act of July 27, 1868; sec. 1999, Rev. Stat.), as follows:

Whereas the right of expatriation is a natural and inherent right of all people, indispensable to the enjoyment of the rights of life, liberty, and the pursuit of happiness; and whereas in the recognition of this principle this Government has freely received emigrants from all nations, and invested them with the rights of citizenship; and whereas it is claimed that such American citizens, with their descendants, are subjects of foreign states, owing allegiance to the governments thereof; and whereas it is necessary to the maintenance of public peace that this claim of foreign allegiance should be promptly and finally disavowed: Therefore any declaration, instruction, opinion, order, or decision of any officer of the United States which denies, restricts, impairs, or questions the right of expatriation, is declared inconsistent with the fundamental principles of the Republic.

Perhaps these reasons may be regarded by the President worthy of consideration in connection with his decision whether to exercise the authority given to him by section 39 of the new immigration act to call in his discretion an international conference for the purpose of regulating by international agreement the immigration of aliens to the United States, and providing for the mental, moral, and physical examination of such aliens by American consuls or other officers of the United States Government at the ports of embarka-

tion. There are other reasons why such an arrangement, from an administrative point of view, would be undesirable, if not fraught with great danger, in that it would be vesting in one or more officials stationed in foreign countries, three thousand miles or more distant, the absolute power of determining who shall or who shall not be permitted to come to our shores. It would open wide the door of corruption, which would be very difficult for us to prevent so far removed from the United States. Another reason that presents itself against regulating this subject by international agreement is that I do not see how it could be effected without our seconding the efforts of autocratic governments in upholding their claim to perpetual allegiance, because of which claim such countries, though often urged by us, have persistently refused to negotiate treaties of naturalization. To grant such a right to officials of foreign governments located within this country would be practically vesting such officials with the power to enforce writs of ne exeat, by preventing, to the extent this power is exercised, our citizens from leaving this country for foreign lands.

We have full power over immigration to do as our national policy may from time to time dictate, and we gain nothing by international agreement. A more practical, if not a more effective, method is at our disposal through our diplomacy. As above referred to, when the causes affecting emigration are political and religious oppression and when the effects of these causes are distinctly reflected into other countries by a stream of migrants due directly thereto, the latter countries not only are justified by self-interest, but by the law of nations have the right to remonstrate against the consequent effect upon them by reason of such oppression and the burdens it imposes upon their institutions. This right and the principles upon which it rests were set forth by President Harrison in his third annual message to Congress (1891) as follows:

> The banishment, whether by direct decree or by not less certain indirect methods, of so large a number of men and women is not a local question. A decree to leave one country is, in the nature of things, an order to enter another—some other. This consideration, as well as the suggestion of humanity, furnish ample ground for the remonstrances which we have presented to Russia.

CONTRACT LABOR.

In the immigration act of February 20, 1907, Congress has reenacted, in somewhat more definite shape, the indefinite provisions of prior laws concerning the exclusion of contract laborers, by naming in section 2 as one of the excluded classes of aliens "persons hereinafter called contract laborers, who have been induced or solicited to migrate to this country by offers or promises of employment or in consequence of agreements, oral, written or printed, express or implied, to perform labor in this country of any kind, skilled or

unskilled." Both the act of March 3, 1903, and the new act (section 6) contain an exception to the alien contract-labor provisions permitting States and Territories to advertise "the inducements they offer for immigration." By the act of March 3, 1903 (section 2), there was included in the enumeration of excluded aliens "any person whose ticket or passage is paid for with the money of another, or who is assisted by others to come, unless it is affirmatively and satisfactorily shown that such person does not belong to one of the foregoing excluded classes;" but by the new act there has been added to the requirements concerning aliens whose passage is paid by others the burden of also showing affirmatively and satisfactorily "*that said ticket or passage was not paid for by any corporation, association, society, municipality, or foreign government*, either directly or indirectly." Neither in the new act nor in any of the preceding acts is there any prohibition of, or authority for, the payment of an alien's passage by a *State* or by an *individual*, nor has the attempt been made to definitely limit the extent to which a State may proceed in advertising the inducements such State offers for immigration.

In the practical administration of the law, therefore, many questions must arise to which the statutes furnish no direct, adequate answer. Some such questions are the following:

Is it permissible for an individual to pay the passage of an alien? May a State pay the passage? If so, may the payment be made from funds contributed, directly or indirectly, to the State by corporations, societies, associations, or individuals, or must such payment be made out of State funds collected through ordinary channels? May the advertisements of the State, "printed and published in any foreign country," hold forth to prospective immigrants assurances of employment? May the State, as a factor of its advertising, send representatives into foreign countries to solicit immigration personally and by oral representations, or must the advertising in which the State is permitted to engage be limited to advertisements "printed and published" in the ordinary sense—i. e., by publication in newspapers, magazines, etc.? What meaning should be attached to the expression "induced or solicited to migrate to this country by offers or promises of employment?" In other words, what constitutes a solicitation of immigration?

These questions indicate a few of the complicated combinations of circumstances that arise to which obviously it is extremely difficult to apply obscure provisions of law that must be interpreted by deductive methods of reasoning.

The Department, under advice from the Attorney-General, is construing the provisions of law mentioned so far as they relate to the first three questions given above to mean that no prohibition is

placed upon the payment of an alien's passage by *a State with its public funds* or by *individuals, directly or through the agency of the State*, if their action is in good faith individual; and that the advertising done by a State must be limited to setting forth the inducements offered to immigrants by conditions existing within the State, including the prevailing scale of wages, leaving the aliens to draw their own conclusions as to the advisability of migrating, but that such advertisements must not contain promises of employment. No executive construction of the law, as it affects the last two questions, has yet been made, but in view of their importance a case in which they occur will doubtless soon arise.

To leave to administrative construction the application of the law to a subject of such great importance, so complicated in details, and affecting such varied and extensive interests as this one, is but inviting discontent and criticism, and the necessity for amendatory legislation which will clarify the statutes is obvious. The law should state clearly, in terms incapable of misconception, and not leave to the uncertainties of deductive reasoning, the exact intent of the legislature, not only as to the exception in favor of States advertising their inducements, but also concerning the extent to which a State may proceed and the methods which it may adopt to make its advertisements productive of an increase in population by securing alien settlers.

In this connection I can not better illustrate my views in regard to some important phases of the contract-labor law than to set forth my decision of June 14, 1907, in a typical case affecting contract labor.

Referring to Commissioner Watchorn's letter of June 12, containing the evidence submitted, the findings of the board, and his recommendation approving such findings, namely, that the appeal be dismissed, the subject has had my careful consideration. The contract-labor law, the act of February 26, 1885, entitled "An act to prohibit the importation and immigration of foreigners and aliens under contract to perform labor in the United States, its Territories, and the District of Columbia," as amended by various acts as set forth in the Department's publication, "Immigration Laws and Regulations of February, 1906," had for its object, as clearly set forth in the acts referred to, the exclusion of aliens that come under contracts, expressed or implied. These contracts in the very nature of things are usually, if not invariably, made so that the evidence is carefully concealed, and it requires very thorough investigation to unearth the existence of such contracts. In the execution of this law the Department has invariably considered all the surrounding circumstances, and has based its judgment as to the existence of such contract upon the evidence and circumstances thus adduced. The decision of the Attorney-General of March 20 was not intended to, and has not the effect of, curtailing or infringing upon the discretion vested by law in the Department in arriving at a determination and a decision whether such a contract as defined in the law exists in a particular case, and does not preclude the head of this Department from determining for himself from the evidence adduced the fact of the existence of such a contract. The testimony given by Milo Poznanovic and others leaves no doubt in my mind that such a contract as contemplated by the law was made, and that if the ma-

chinery of the immigration law permitted such an exhaustive investigation as is had in a court of law even an enforceable contract would, in my judgment, be disclosed. I am desirous of exercising my full powers, and the discretion vested in me by law, to put an end to the abuses of the contract-labor law and to discourage to the utmost within my powers the continuance of these contracts, and to protect the labor of this country in its full rights under the fair and reasonable construction of the meaning and spirit of the laws above referred to. I therefore approve the findings of the board of special inquiry upon the hearing and rehearing of this case, and dismiss the appeal.

CHINESE IMMIGRATION.

The present policy of the United States with reference to Chinese immigration, as developed by both the legislative and the executive departments of the Government, is of long standing, having existed for nearly a generation. A governmental policy so long pursued is not lightly to be changed, nor is any change proposed. What I have to urge is not only based upon a full recognition of the fixed character of the present policy, but is entirely in furtherance thereof. It is not the policy of the Government with reference to Chinese immigration that I would criticise, but the manner in which it is of necessity carried out, by reason of the way in which the laws are framed. It has never been the purpose of the Government, as would appear from its laws and treaties, to exclude persons of the Chinese race merely because they are Chinese, regardless of the class to which they belong, and without reference to their age, sex, culture, or occupation, or to the object of their coming or their length of stay. The real purpose of the Government's policy is to exclude a particular and well-defined class, leaving other classes of Chinese, except as they, together with all other foreigners, may be included within the prohibitions of the general immigration laws, as free to come and go as the citizens or subjects of any other nation. As the laws are framed, however, it would appear that the purpose was rigidly to exclude persons of the Chinese race in general and to admit only such persons of the race as fall within certain expressly stated exemptions—as if, in other words, exclusion was the rule and admission the exception. I regard this feature of the present laws as unnecessary and fraught with irritating consequences. In the administration of laws so framed, notwithstanding the care taken to treat persons of the Chinese race lawfully entitled to admission with the same courtesy and consideration shown to other foreigners, it is impossible that persons who have to endure requirements and formalities peculiar to themselves should fail to take offense, and to resent as a humiliation the manner in which by law they are distinguished from natives of other countries. Laws so framed can only be regarded as involving a discrimination on account of race, and it is needless to point out that discriminations on account of race, color, previous condition, or religion are alike opposed to the principles of the Republic and to the spirit of its institutions.

It is not surprising, therefore, that both the Chinese Government and the Chinese people should feel aggrieved, and should in various ways manifest their resentment and displeasure. The attitude of the Chinese Government may be inferred from the fact that, in 1904, after the convention of 1894 had been in force for ten years, China, availing herself of a right reserved, formally denounced the treaty, thus refusing longer to be a party to an arrangement which, as carried into effect by legislation, was offensive to her national pride. It is not improbable that one of the reasons which led to this action on the part of the Chinese Government was the interpretation which came to be placed upon the treaty and laws relating to Chinese immigration. The understanding in China, her officials contended, was that the object both of the treaty and the laws was to keep out laborers, and that it was never intended that the enumeration of certain exempt classes should operate as an exclusion of all other classes and of laborers besides. This interpretation was rejected, and the necessary effect of all the laws on the subject was declared to be that not only those Chinese should be excluded who are particularly and expressly forbidden entrance, namely, Chinese laborers, but that only those may be admitted who are expressly allowed, although it was admitted that there was authority for the opposite view, and that the Supreme Court had never decided the matter (see correspondence between the Chinese minister and the Secretary of State, 4 Moore's Int. L. Dig., 217). For proof of the feeling of the Chinese people it is only necessary to refer to the boycott of American goods, inaugurated by various trade guilds and business and commercial associations of the Empire during the summer of 1905. While this boycott was happily of short duration and its immediate effects were not as serious as they might have been, the importance of the boycott, as an indication of the degree to which American commercial interests in China are menaced, is not to be overlooked.

In 1905 China held first rank among oriental countries as a consumer of American products. In that year her total commerce amounted to 497 million dollars, of which 329 millions were imports. Of these imports, according to the Chinese official data, the United States supplied 57 millions, or more than 17 per cent. As the exports of the United States to China had grown to these proportions by rapid strides—it amounted to less than 3 millions in the seventies, and only reached 7½ millions in 1886, 12 millions in 1897, 15 millions in 1900, and 24 millions in 1902—it was confidently hoped that, as commercial intercourse between the two nations increased, as the needs of the Chinese markets became better understood, and as the character of American products became better known, American trade would continue to progress in the same *ratio* and a larger and larger share of the foreign trade of China

would accrue to the United States. Instead of that, however, the exports of the United States to China, according to our statistics, fell from 53 millions in the fiscal year 1905 to 44 millions in 1906 and to 26 millions in 1907. I would not be understood as attributing this decline wholly to the boycott of 1905, or to measures of retaliation on the part of China or her people on account of the exclusion laws. In the first place, our trade with China was abnormally large in 1905, and, undoubtedly, the overstocking in that year of the Chinese markets with cotton manufactures in anticipation of the opening of Manchuria following the close of the Russo-Japanese war, as well as the stoppage of the minting of new copper coins, which had led to the purchase of immense quantities of American copper, are largely responsible for the decline. So large a decline, however, as a drop in our exportations to that country of from 53 to 26 millions (50 per cent) in two years is sufficiently startling to challenge the attention of legislators and statesmen. As the head of the Executive Department whose province and duty it is "to foster, promote, and develop the foreign and domestic commerce, the mining, manufacturing, shipping, and fishery industries, the labor interests, and the transportation facilities of the United States," I would deem it a dereliction of duty on my part if I failed to invite the attention of Congress to the practical effect upon nearly all of these important interests of existing legislation in its present form. In so doing I have no wish to oppose what I understand to be the real policy of the legislative department of the Government, but desire merely to urge that this policy be effectuated, as I believe it can, without causing unnecessary offense or needless hardship.

But on higher grounds than those of mere commercial self-interest should the frame of the laws be changed. The relations between China and the United States have always been most friendly. It is not only the right but the duty of this Government, for its own protection and for the security and welfare of its citizens, to exclude foreigners from its territory whenever the public interests require, but to so exercise that right as needlessly to offend the amour propre of a friendly nation, or unnecessarily to humiliate a whole people when only a particular class is to be reached, can not be the action intended, and should be guarded against in every possible way. A change in the established policy of rigidly excluding Chinese laborers of every description, both skilled and unskilled, is not even suggested. This policy has been and will continue to be as effectively enforced as circumstances will permit. At a time when the policy of exclusion has been so thoroughly applied that there remain in the United States only about 70,000 Chinese, or less than one-tenth of 1 per cent of the total population, little danger need be apprehended from a full and

fair reconsideration of the whole subject and a recasting of the laws upon a juster basis. During the past fiscal year only 857 Chinese persons were newly admitted to the United States; of the balance of those admitted, all of whom were prior residents, 855 were native-born citizens, 733 were merchants, and only 765 were laborers. As against the total admissions, moreover, there were 336 deportations and an unknown number of voluntary departures. In view of this showing, a more opportune moment than the present can hardly be desired for reaching a better understanding with China on the subject of Chinese immigration and for adjusting our policy in this regard to the demands of justice and equality. This could be done, not by making it any easier for Chinese laborers to enter, but by so framing our laws and treaties as to make admission the rule and exclusion the exception, while preserving at the same time, in all its integrity, the present policy of the laws, and even strengthening where necessary the real prohibitory features thereof, through a full and explicit definition of the excluded classes, thus complying with the recommendations of President Roosevelt, contained in his annual message to Congress of December 5, 1905:

> There is no serious proposal to alter the immigration law as regards the Chinese laborer, skilled or unskilled, and there is no excuse for any man feeling or affecting to feel the slightest alarm on the subject. But in the effort to carry out the policy of excluding Chinese laborers, Chinese coolies, grave injustice and wrong have been done by this nation to the people of China, and therefore ultimately to this nation itself. Chinese students, business and professional men of all kinds—not only merchants, but bankers, doctors, manufacturers, professors, travelers, and the like—should be encouraged to come here and treated on precisely the same footing that we treat students, business men, travelers, and the like of other nations. Our laws and treaties should be framed not so as to put these people in the excepted classes, but to state that we will admit all Chinese, except Chinese of the coolie class, Chinese skilled or unskilled laborers. There would not be the least danger that any such provision would result in any relaxation of the law about laborers. These will, under all conditions, be kept out absolutely. But it will be more easy to see that both justice and courtesy are shown, as they ought to be shown, to other Chinese, if the law or treaty is framed as above suggested.

During the past year I have been able by departmental regulation to take several steps with a view to the better administration of the Chinese immigration laws. Among others the following may be mentioned:

Owing to the relatively small number of persons in the United States who are familiar with the various Chinese dialects, and the still smaller number who are able to read and write the language and to correctly render it into English, and vice versa, the Department has in the past experienced considerable difficulty in securing reliable and competent Chinese interpreters. Rumors having reached the Department to the effect that some of the Chinese interpreters

were incompetent, coupled with intimations, unsupported by proof, that others were in collusion with those interested in the unlawful landing of Chinese, in order to test the efficiency of the service and to break up improper associations, if any, growing out of long continued service at one port, I ordered the transfer of practically every Chinese interpreter to a new station, and have besides designated two interpreters of proved ability and honesty to visit each port where such persons are employed for the purpose of conducting a rigid examination as to their competency as well as their honesty. This arrangement, I am confident, will be productive of good results.

It has come to the attention of the Department that domiciled Chinese laborers who are desirous of visiting their native country have considered themselves bound to employ the services of attorneys and others to fill out their applications for return certificates, thereby incurring a charge ranging from $5 to $25 in each case, and possibly a larger fee. Believing such an expense to be entirely unnecessary and that such a practice readily leads to extortion, instructions have been issued to officers of the Chinese immigration service at the various ports to inform all Chinese of this class that all applications for return certificates will be drawn by immigration officers without charge.

INSULAR AND MAINLAND IMMIGRATION CONTRASTED.

Legislative regulation of immigration would present a relatively simple problem if the United States were a small and compact nation, whose industrial operations were so generally alike as to be susceptible of a uniform system of regulation. But the industries and occupations of the people of the United States are greatly diversified and are carried on under widely varying conditions. Moreover, instead of being confined to a single contracted area, the jurisdiction of the nation extends to such distant and far separated possessions as Alaska, Panama, Porto Rico, Hawaii, Guam, and the Philippines. These outlying possessions not only differ from the body of the continental territory as to their position and needs with regard to labor and immigration, but they differ likewise among themselves. It is not to be expected, therefore, that a particular policy of restriction in the matter of immigration, expressly designed to meet the situation on the mainland, should be perfectly adapted to the needs of insular communities. Each of these communities has its own industrial problems to solve, and the conditions in each should be considered before it is brought within the operation of a general rule. The need of differentiation in the regulation of immigration I believe to be obvious for the reasons stated. The need was brought home to me with great force when, during the past summer, besides actually viewing the administration of the immigration laws along the borders of Canada and on the Pacific coast, I personally visited the Hawaiian

Islands, and saw for myself something of the effect of these laws upon the occupations of the people. As a result of this experience, and of the best consideration I have been able to give to the subject, I believe that the attention of Congress should be directed to the question of immigration into the insular possessions of the United States, to the end that the special conditions peculiar to these several possessions individually may be taken into account, and expressly provided for by legislation. I have elsewhere pointed out, speaking of the contract-labor laws, the need of clearly defining how far States and Territories may go in advertising the inducements they offer for immigration, and in securing funds for the prepayment of passage money of foreign laborers. A clear expression of the legislative will on this point is especially desirable with reference to insular immigration.

The principle upon which the foregoing recommendation is founded, namely, that legislation, while necessarily laying down a rule of general application, should nevertheless be framed with a view to the needs of particular localities, is not a new one, but has been recognized by Congress in the enactment of existing immigration laws. Thus, the administration of the immigration laws in the Philippine Islands is placed, not in the Department of Commerce and Labor, but with the officers of the general government of the islands (act of February 6, 1905, section 6); the Panama Canal Zone is expressly excepted from the operation of the general immigration act excluding aliens from the United States (act of February 20, 1907, section 33); and the head tax payable on account of aliens generally coming to this country is not required in the case of aliens arriving in Guam, Porto Rico, or Hawaii. By the enactment of these provisions Congress has plainly recognized the propriety of distinguishing between the continental and the insular territory of the United States in regulating immigration. Indeed, the correctness of this principle can hardly be controverted, nor can it be reasonably contended that a further differentiation in this direction would have the effect of weakening the force of the laws as applied to the mainland. The only possibility of danger would be the chance that aliens, say contract laborers, prohibited from entering the mainland, who might be permitted by law to enter insular territory, would, after such admission, be able to evade restrictions imposed elsewhere and secure entrance to sections forbidden to them. But this danger, if such it may be called, could easily be guarded against by adopting a proviso similar to that now in effect with reference to aliens admitted to the Canal Zone, which provides:

> That if any alien shall leave the Canal Zone and attempt to enter any other place under the jurisdiction of the United States, nothing contained in this act shall be construed as permitting him to enter under any other conditions than those applicable to all aliens.

NATURALIZATION.

During the nine months of the fiscal year in which the act of June 29, 1906, has been operative, the Division of Naturalization has been organized, the courts upon which jurisdiction was conferred have been supplied with the blank forms of declarations, petitions, and certificates, and general supervision assumed of naturalization matters throughout the country. By such means a strict conformity to the requirements of the law as to the substance and form of the various papers used by the courts as evidence of each of the successive steps in the process of naturalization has been secured and can be maintained.

There remains, however, as a necessary feature of a complete and effective administration, the organization of a corps of examiners, whose services are necessary to investigate the statements made in the petitions, as well as to ascertain the competency and credibility of the witnesses.

The report by the division of the operation of the new law shows that from September 26 last to the end of the fiscal year 72,684 declarations of intention and 20,802 petitions for naturalization have been filed in the various courts having jurisdiction of such proceedings as have exercised their authority under the act, and that 7,735 have been granted certificates and 250 have been denied.

These figures probably represent very inadequately the amount of naturalization business that has been transacted in the past, and that in the future will be disposed of annually by the courts. A number of circumstances combined to lessen the number of naturalization certificates granted during the year, chief among which may be mentioned the greatly reduced number of courts empowered to confer citizenship, the tardiness of State courts to assume jurisdiction, and the popular understanding that not because of the additional requirements of the law, but on account of the supervision assumed by the Government, it would be difficult for any alien to produce competent evidence of his qualifications to become naturalized. The chief reason for the reluctance of the State courts to undertake the work is the insufficient compensation for the amount and nature of the work imposed by the law upon the clerks, and the penalties for derelictions of duty. The result is both to put petitioners to serious cost and inconvenience and to overburden the Federal courts and retard the disposal by them of other business. The remedy is plain. The fees now allowed clerks should be doubled and legislation should be adopted which will remove any doubt that such fees may be retained, as compensation for the additional labor and responsibility, by those clerks of State courts who are allowed fixed salaries by the States.

As bearing upon the same question of compensating clerks of courts, it is recommended, in view of a decision of the Comptroller of the Treasury which virtually holds that the authority granted to allow, under certain conditions, the use of a portion of the fees turned over to the Government to pay for additional clerical help is void, that this legislation be amended so that the purpose intended may be accomplished.

During the year, under section 15 of the act, proceedings have been instituted to cancel certificates procured by misrepresentation in 143 cases, of which 57 are pending and 86 have resulted in the cancellation of such certificates.

Many of these cases were based upon information furnished by the Department of State, either as the result of applications for passports by naturalized citizens going abroad or through information furnished by the consular representatives of the United States resident in foreign countries. This is one of the most important results of the new act. The embarrassment occasioned by claimants for the protection of the United States whose acquired citizenship is of doubtful authenticity and the frequent menace to our peaceful relations with foreign countries in which such claims for protection are made are familiar experiences to our diplomatic and consular officials.

Since experience has shown that the numerous courts of original jurisdiction under the act reach independent and varying conclusions as to the correct construction of the law it is obviously important that by express legislation the right of review should be given, both on behalf of the petitioner and the Government. in courts of final resort.

Of the appropriation of $100,000 there has been expended during the year $29,243.18, leaving a balance of $70,756.82. The total collections for the year, consisting of one-half of the fees paid by declarants and petitioners, have aggregated $65,129. This, from the data in the Division of Naturalization, appears to be a very much smaller amount than will hereafter be annually collected from this source.

BUREAU OF CORPORATIONS.

The Bureau of Corporations has continued the work prescribed in its organic act in the investigation of corporations engaged in the great interstate industries. Since the organization of the Bureau in 1903 a number of important reports have been issued. The first annual report in 1904 set forth the policy of the Bureau, with comment on certain questions raised by industrial combination. The Report on the Beef Industry was issued in 1905 and the Report on the Transportation of Petroleum in 1906, the latter report setting forth a large number of discriminations in railway rates, upon which have been based numerous indictments and convictions for violation

of the interstate-commerce act and its amendments. These reports were made during the time when the Hon. James Rudolph Garfield, now Secretary of the Interior, was Commissioner of Corporations.

In May, 1907, the present Commissioner submitted to the President Part I of a Report on the Petroleum Industry, dealing with the position of the Standard Oil Company in that industry. The Bureau is occupied, as current work, with making investigations into the steel, lumber, and tobacco industries, as well as with further work on the petroleum industry, and with inquiries connected with canals, coastwise and river navigation, cotton exchanges, the International Harvester Company, and in making a special investigation relating to patents held by Government employees upon articles in use by the Government. It is believed that these investigations will set before the public a number of important economic and financial facts and tendencies that will be of the highest value in dealing with great industrial problems.

The work of the Bureau is to collect carefully the facts in a given industry, and to arrange and summarize them for publication in such form that they will show the important and permanent methods of production, transportation, and marketing of staple articles of commerce, as well as the costs, prices, and profits involved. Its primary purpose is to set before the public in condensed and reliable form the information upon which to base an intelligent opinion of corporate operations. The work of the Bureau thus far on these lines has fully justified the objects and purposes which led to its creation.

With very few exceptions the Bureau has had the cooperation of the large corporate interests involved in the subject-matters of its various investigations. The assistance thus given to the Bureau by the leaders of industry has been very encouraging, both in its production of the results desired and also in its indication of the attitude of such interests toward the fundamental objects for which this Department was created, to wit, the promotion of commerce and the correction of commercial evils.

It is believed that the experience of the Bureau has signally justified that phase of the policy of the Administration which has been aimed at securing an efficient publicity in interstate corporate matters by Federal means; that so great has been the centralization in business affairs that such publicity can only be attained through the General Government, and that ultimately the national development of industries will force the adoption of a national system of regulation or supervision of some such general nature as that already applied to national banks, in order that the significant facts of corporate management may be correctly laid before Congress and the public as the only proper basis for just and intelligent action thereon.

Corporate activity has become national in its commercial scope, but its legal status is still delimited almost wholly by State statutes, a discrepancy that has been the cause of many existing evils. The legal conditions should at least be brought into some reasonable relation to the business facts. Corporate commerce, as carried on by those great companies whose operations substantially constitute the whole problem before us, is national. The control over them, to some extent at least, should also be national, by the General Government. The power and jurisdiction of the regulative authority should be commensurate with the field of operations of the corporations to be regulated. Centralization as a business fact has been accomplished. It only remains to be determined whether legal conditions shall be adjusted to the facts which they are supposed to cover.

Nor is there any need that such Federal supervision should derogate from proper State power. Such a system merely implies that the Federal Government would attend to those national affairs of interstate commerce clearly intrusted to it by the Constitution, affairs in which, by the very nature of the subject-matter, the States are to a great extent powerless, and their action largely conflicting and nugatory. Only uniform control can give uniformity of action and effectual publicity.

As illustrative of the value of such efficient publicity, it is well to call attention to the effect of the report of the Commissioner of Corporations on the Transportation of Petroleum, made in May, 1906, setting forth the detailed facts in regard to a large number of railway discriminations, some illegal and others, while possibly legal, nevertheless quite as unfair. Numerous indictments based on this report have been brought, and convictions in two cases have occurred. But by far the most significant result was the immediate cancellation by the railroads concerned of every illegal rate criticised in the report as well as of many of the systems of discriminations which, while possibly not illegal, were unfair. It is believed that the general practice of giving and accepting railway discrimination has never been so much curtailed as it has been since the publication of this report.

The experience of the Bureau in its examination of the operations of a number of great corporations has also brought out clearly the real object toward which the efforts of the Government should be directed. Industrial combination, as such, appears to be an inevitable economic necessity. This fact must be recognized in order to treat the matter successfully. The prohibition of commercial power simply because it results from combination is futile and may be harmful. It is not the existence of such power, but its misuse, to which attention must be directed. Commercial success which is based solely upon the proper use of commercial power, upon the giving of better service or lower prices than any competitor, is a success that justifies

itself, is a proper business development, and works benefit both to the public and to the corporation. On the other hand, success that is based not on service to the public, but on the destruction of competitors by unfair methods, is an evil to be prevented. The one concern holds its power because it best serves the public; the other concern holds its power because it actively prevents competitors from serving or attempting to serve the public. It should be the aim of the Government to keep open equally to all men the avenue of commercial opportunity, and to prevent the use of those unfair means that destroy or diminish such opportunity, that close it to one man while leaving it open to another.

It is believed, and the belief is based on experience, that publicity is the best deterrent against such unfair methods, and that few, if any, corporate managers have the courage to continue openly evil practices when the exact details thereof have been or may at any time be made specifically public, by name, date, amount, or place.

It is believed that the work of the Bureau of Corporations, as carried on now and in the past, constitutes the best means yet created for accomplishing this object and for establishing that efficient publicity which will, of itself, most effectually end unfair competition, and it is further believed that the extension of its work in the form of some general plan of Federal supervision would be the logical and proper outcome of its past experience.

BUREAU OF LABOR.

The act creating the Bureau of Labor directs that the Bureau shall "acquire and diffuse among the people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of that word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity." Under this authorization the Bureau has a wide field for work, and by properly directed investigations it can assist in legitimately furthering at one and the same time the interests of laboring men and women and the general social well-being.

INVESTIGATION OF WOMAN AND CHILD LABOR.

The investigation into the condition of woman and child wage-earners, recently authorized and directed by Congress, which has been placed by me under the charge of the Commissioner of Labor, is one of the most important investigations that have been undertaken by that Bureau, and one from which it is fair to assume that effects will flow beneficial alike to woman and child wage-earners and to the community as a whole. If under the present circumstances of the employment of women and children there is avoidable waste of

efficiency, health, or life, or of the mental or moral well-being of these workers, such conditions should be corrected in the interest alike of the individual sufferer and of the body social.

This investigation goes into a field of inquiry beset with many difficulties, and the plan for the work aims to secure results both comprehensive and convincing. The best equipped men on the staff of the Bureau have given months to the careful study of the subject, and the work is now fully under way and will engage the time of between 60 and 100 workers during the whole of the fiscal year 1908.

MEDIATION UNDER THE ERDMAN ACT.

During the past year the work of the Bureau of Labor has been carried into a new field, owing to the invoking of the so-called Erdman Act. This act was approved June 1, 1898, and provides, among other things:

> That whenever a controversy concerning wages, hours of labor, or conditions of employment shall arise between a carrier subject to this act and the employees of such carrier, seriously interrupting or threatening to interrupt the business of said carrier, the chairman of the Interstate Commerce Commission and the Commissioner of Labor shall, upon the request of either party to the controversy, with all practicable expedition, put themselves in communication with the parties to such controversy, and shall use their best efforts, by mediation and conciliation, to amicably settle the same; and if such efforts shall be unsuccessful, shall at once endeavor to bring about an arbitration of said controversy in accordance with the provisions of this act.

Up to December, 1906, the above provision of this act had never been made use of, but since that date the mediation provided for in the act has been appealed to repeatedly by the railroads of the country. The idea of an official board of mediation has thus, within the past year, been subjected to repeated tests and has been proved to be extremely beneficial in practice.

The most conspicuous test of the usefulness of the law occurred in March, 1907. The Order of Railway Conductors and the Brotherhood of Railroad Trainmen had been in conference at Chicago for some two months with a committee of general managers representing practically the entire railroad mileage in the United States west of Chicago. The conference was for the purpose of settling wages, hours of service, and other conditions of employment for conductors and railroad trainmen on all the railroads in the territory extending from the Illinois Central Railroad to the Pacific coast. All efforts to reach an agreement between the railroads and their employees had failed, and the two organizations of employees had submitted the dispute to a vote of their membership, and that vote, with practical unanimity, had declared in favor of a strike in the event that a satisfactory settlement of the points in dispute could not be reached.

This was unquestionably the largest and perhaps the most important industrial dispute that has ever arisen in the United States, and the disastrous results that would have followed a general strike of such magnitude are incalculable.

The committee of general managers invoked the mediation provided for in the Erdman Act, and the Commissioner of Labor and the chairman of the Interstate Commerce Commission went to Chicago in person, and through their efforts a settlement satisfactory to both sides was reached within ten days.

Thus far the operation of the law has won the cordial approval not only of the public, but equally of the railroad companies and the organizations which have been involved in the controversies settled through this form of mediation. Experience in the matter, however, covers so short a period that the test of the efficiency of the law is still in the early experimental stage. We are in a period of high prosperity and advancing wages; the practical test for any project to preserve industrial peace comes with declining prices and the accompanying effort to reduce wages. However, if the law is of aid to any extent in preserving industrial peace, it is to that extent a success and at least marks progress in a very important direction.

STRIKE OF TELEGRAPHERS.

In June, 1907, a serious injury to the commercial and general public interests was threatened by a general strike of telegraphers against the Western Union and Postal Telegraph companies. The telegraph companies are not included within the terms of the Erdman Act, but in view of the losses and other serious consequences to the general public involved in any serious interruption of telegraphic communication, and in response to numerous appeals from various parts of the country, the Commissioner of Labor endeavored to bring about a peaceable settlement of the controversy. An adjustment was reached by which the danger of a strike seemed to be averted, but through an apparent misunderstanding a local strike of telegraphers occurred almost immediately in San Francisco. This strike threatened to become general, but through further efforts at mediation a settlement was reached before the strike had spread beyond San Francisco, and again peace seemed to be assured. Within a comparatively few days afterwards, a difficulty arose in Los Angeles which brought about a local strike at that point and which, without the sanction of the national officers of the union, spread rapidly from place to place until it became a general strike affecting, to a greater or less extent, almost the entire country. Repeated efforts were made and everything that could with propriety be done by a representative of the Government was done to bring about a settlement of the difficulty, but these efforts proved entirely fruitless.

PUBLICATIONS.

During the fiscal year ended June 30, 1907, the Bureau issued its Twenty-first Annual Report—that for 1906. This report presents the results of an investigation of strikes and lockouts in the United States for the years 1901 to 1905, inclusive, together with summaries covering the twenty-five year period 1881 to 1905.

The report contains many summary tables, as well as many special tables and much text discussion relating to the most significant features of strikes and lockouts. Special chapters give the statistics of strikes and lockouts in foreign countries for a period of years, as well as the law relating to strikes, blacklisting, boycotting, etc., in the various States and in the United States.

This is the fourth report issued by the Bureau relating to strikes and lockouts, the Third Annual Report covering the years 1881 to 1886, the Tenth the period from January 1, 1887, to June 30, 1894, and the Sixteenth the period from July 1, 1894, to December 31, 1900.

It is believed that every labor disturbance of importance occurring in the United States from 1881 to 1905 has been included in this report. The general tables show that, excluding strikes and lockouts of less than one day's duration, there were 36,757 strikes and 1,546 lockouts in the United States during this period of twenty-five years, or a total of 38,303 disputes. Strikes occurred in 181,407 establishments and lockouts in 18,547 establishments. A total of 6,728,048 persons went on strike and 716,231 were locked out, and the number of employees, including strikers, thrown out of work by strikes was 8,703,824, and the number thrown out of work by lockouts was 825,610. The average duration of strikes per establishment was 25.4 days and of lockouts 84.6 days.

During the past year the Bulletin of the Bureau was issued regularly every other month. The Bulletin has contained, in addition to one or more special articles in each number, digests of recent reports of State bureaus of labor statistics, digests of recent foreign statistical publications, decisions of courts affecting labor, and laws of various States relating to labor. The special articles included in the Bulletin for the past year are as follows:

Bulletin 65 contained "Wages and hours of labor in manufacturing industries, 1890 to 1905," and "Retail prices of food, 1890 to 1905." These two articles are in continuation of a regular series of Bulletin articles (begun in Bulletin 59) to be published annually, supplementing and continuing, respectively, the Nineteenth Annual Report, relating to wages and hours of labor, 1890 to 1903, and that portion of the Eighteenth Annual Report which relates to retail prices of food, 1890 to 1903.

The work of the Bureau, so far as the preparation of Bulletin 65 was concerned, was limited to collecting and preparing for presentation data for the year 1905. Data relative to wages and hours of labor in 1905 were secured covering 349 occupations, and a total number of 4,121 establishments engaged in 42 industries. The compilation of retail prices of food included 6,193 schedules or statements of prices from 999 firms doing business in the principal industrial localities in 39 States, including the District of Columbia.

Bulletin 66 was a reprint of the third report upon the commercial, industrial, social, educational, and sanitary condition of the laboring classes of the Territory of Hawaii, which was published as a special report in the preceding year. As no provision was made by Congress for printing the report for general distribution, it was thought proper to reprint it as one of the regular bulletins of the Bureau.

Bulletin 67 contained "Conditions of entrance to the principal trades" and "Cost of industrial insurance in the District of Columbia." The first article is a study of the changes in the conditions of entrance to the principal skilled occupations that have resulted from the displacement of hand processes by highly developed machine methods and the consequent minute subdivision of labor in many industries. The second article gives the results of an investigation in the District of Columbia into the cost of insurance when purchased in small amounts and for small weekly payments (as is necessary with many working people whose earning capacity is small), as compared with the cost when purchased in the ordinary way and paid for quarterly, semiannually, or annually.

Bulletin 68 contained "Free public employment offices in the United States" and "Laws of foreign countries relating to employees on railroads." The first article presents the results of a comprehensive investigation into the operations of all the free public employment offices supported by the States, or the cities, and designed to bring employee and employer together for the purpose of furnishing employment to the former and help to the latter. The second article gives the substance of the laws and decrees in force in the principal foreign countries which have for their purpose the fixing of the conditions of employees engaged in the operation of railways, including provisions as to the conditions of employment and discharge, the employment of women, the regulation of hours of labor and of holidays, the determination of wages, the right of organization, and penalties for the abandonment of service.

Bulletin 69 contained "Wholesale prices, 1890 to 1906," bringing down to the end of 1906 the results of the study of the subject, the publication of which was begun in the Bulletin of March, 1902, and continued in the corresponding Bulletin of each subsequent year.

The study covers 258 series of quotations, representing all classes of staple commodities.

Bulletin 70 contained "The Italian on the land—A study in immigration," "A short history of labor legislation in Great Britain," and "The British workmen's compensation acts." The first article gives the results of a study of Italian immigrants who have settled in Hammonton, N. J., and have become successful small farmers or workers in a typical American rural community. The second article gives a short sketch of the various steps that have been taken in Great Britain to protect by legislation men, women, and children working in factories and workshops and to ameliorate working conditions. The third article is devoted to a study of the development of legislation providing for compensation for workmen injured in their employment—the so-called employers' liability and workmen's compensation acts.

In addition to the preparation and compilation of the report and bulletins described, which cover the publications of the last fiscal year, the force of the Bureau has been engaged in the collection and preparation of data for a number of future reports and bulletins. The annual report for 1907 will relate to workingmen's insurance and employers' liability.

During the year data for 1906 were collected from manufacturers relative to wages and hours of labor in manufacturing industries and from retail merchants in regard to the retail prices of the principal articles of food. The results of these investigations were published in the Bulletin for July, 1907 (No. 71), in continuation of the reports already made covering the period 1890 to 1904.

BUREAU OF STATISTICS.

INCREASE IN IMPORTS AND EXPORTS.

The Bureau of Statistics, which records the foreign commerce of the United States and such features of the internal commerce as are available in statistical form, reports both the foreign and domestic commerce as greater in 1907 than in any preceding year. The most strongly marked characteristic of the year's commerce is an increase in imports, which grew from $1,226,562,446 in 1906 to $1,434,421,425 in 1907, while the exports of domestic merchandise grew from $1,717,953,382 in 1906 to $1,853,718,034 in 1907. Both imports and exports show a larger total value in 1907 than in any earlier year.

The increase in importations occ[illegible] [illegible]aterials for use in manufacturing and in manu[illegible] [illegible] in a cru[illegible] condition, chiefly coffee, tea, an[illegible] [illegible] foodstuffs partly or wholly m[illegible] [illegible] increased but $18,298,149; [illegible] *chiefly silk, cotton, her*

increased $62,339,175; manufactures for further use in manufacturing, chiefly tin, copper, lumber, and iron and steel in a partially manufactured state, increased $53,797,713; while finished manufactures, chiefly silks, laces, dress goods, and miscellaneous articles, show an increase of $56,391,730.

The increase in exports occurred chiefly in manufacturers' materials and manufactures. Foodstuffs in a crude condition, chiefly grains, show a decrease of $9,868,240; foodstuffs partly or wholly manufactured, chiefly flour and meats, show a decrease of $1,678,853, while crude materials for use in manufacturing, chiefly cotton, show an increase of $92,608,435; manufactures for further use in manufacturing, including copper, leather, and the lower grades of iron and steel manufactures, an increase of $33,204,271, and finished manufactures an increase of $20,896,011.

EFFECT OF INCREASED PRICES ON IMPORTS AND EXPORTS.

The Bureau has devoted much attention during the past year to an effort to determine to what extent the general advance in prices is responsible for the increase in total value of imports and exports during recent years. While the total value of imports has doubled since 1899 and that of exports has increased more than 50 per cent in the same period, the well-known fact that prices of nearly all articles have in the meantime greatly increased both at home and abroad suggests that the growth in quantity of merchandise imported and exported is probably materially less than that indicated by the growth in total values only. To determine this question of the relationship of higher prices to the increased valuation of either imports or exports, the Bureau of Statistics has made careful analyses of prices of articles imported and exported in 1907 compared with those of 1899, the prices of the various articles being, in the case of imports, those of the articles in the countries whence imported, and in the case of domestic exports those at the ports of exportation from the United States. These analyses indicate that a very considerable share of the growth in both imports and exports is due to higher prices, though in many articles there has been also a material increase in quantity. In foodstuffs imported the advance in prices per unit of quantity has been comparatively slight, but in manufacturers' materials the increases in prices are large, ranging in some cases above 100 per cent, and this is also true of exports of manufacturers' materials. For example, the average price per pound of pig tin imported in 1907 is 126 per cent greater than that of 1899, and the average export price of raw cotton in 1907 93 per cent in excess of that of 1899, while in many other articles for manufacturing the advance in prices ranges between 50 and 100 per cent.

The advance in prices, in both imports and exports, seems to be especially marked in articles for use in manufacturing. Among the articles showing an increase of more than 100 per cent in price per unit of quantity in 1907 compared with 1899 are, on the import side, iron ore, nickel ore, pig tin, jute, vegetable ivory, gum chicle, nitrate of soda, and shellac, and on the export side, sawed timber and rosin. Those showing an increase of between 75 and 100 per cent in price include, on the import side, clothing wool, lumber, and Egyptian cotton, and on the export side, raw cotton and spirits of turpentine; those showing an advance of from 50 to 75 per cent are chiefly manufactures for further use in manufacturing and, in a few cases, foodstuffs, though most of the foodstuffs showing an advance fall within the group in which prices have increased less than 50 per cent, and this is also true of finished manufactures, which show, where prices can be determined, an average advance much less than the average increase in price of the raw materials from which they are produced. It is proper to add, however, that no exact statement of the relative advance in prices of manufacturers' materials and finished manufactures, respectively, can be presented, owing to the absence of statements showing quantities of many of the important articles imported or exported, and thus an inability to determine the price per unit of quantity; but where prices can be determined the advance in prices of manufactures appears to be proportionately less than that of manufacturers' materials, especially those imported or exported in the crude or natural condition. This fact, that prices per unit of quantity can not be determined in all articles imported or exported, renders impossible a determination of the exact share of the increased totals of imports and exports which is due to advance in prices.

The record of the year's commerce shows increased imports from all the grand divisions and the principal countries and increased exports to all grand divisions except Asia and Africa and to all of the principal countries except China.

ACTIVITY OF INTERNAL COMMERCE.

Internal-commerce records, whether of movements of freights on the Great Lakes or of those entering the principal cities and upon the great railroad lines, indicate an increased activity in the internal as well as in the foreign commerce of the United States. The fact that most of the records of commercial movements, either by rail or water, relate to calendar rather than fiscal years renders impossible a detailed statement of the internal commerce of the present year, but in general terms it may be said that the records of freight movements thus far developed in 1907 indicate that the internal commerce

of the United States in the current year will exceed that of any preceding year, and that this applies both to movements on the Great Lakes and on the principal railway lines of the country.

TRADE WITH NONCONTIGUOUS TERRITORIES.

Trade of the United States with its noncontiguous territories shows a marked increase. The value of merchandise shipped to Porto Rico, Hawaii, the Philippine Islands, Guam, Tutuila, the Midway Islands, and Alaska in the fiscal year 1907 was $67,250,714, against $51,669,587 in 1906; and of merchandise brought from those Territories $74,850,517, against $67,688,169 in the fiscal year 1906; while the value of gold of domestic production received from Alaska in the fiscal year 1907 was $18,564,228, or more than double the original cost of that Territory.

BUREAU OF MANUFACTURES.

The Bureau of Manufactures was expressly created by Congress for the purpose of fostering, promoting, and developing the various manufacturing industries of the United States and markets for them at home and abroad. It accordingly devoted particular attention the past year to acquiring and disseminating such information in regard to trade conditions in foreign lands as would prove of most value to American manufacturers and exporters in locating foreign outlets for the surplus of our factories. The necessity for continuous and persistent effort in seeking new and enlarging old fields in foreign countries for the sale of our manufactured products became apparent from the constantly growing demands upon the Bureau from business men in every section of the country for advice and information in relation to market conditions abroad.

INVESTIGATIONS OF MARKETS FOR COTTON GOODS AND COTTON-SEED OIL PRODUCTS.

Realizing the tremendous increase in the demand for cotton goods and the products of cotton-seed oil, the latter of which had grown from a discarded waste of a few years ago into a valuable industry representing an investment of $100,000,000, the Bureau appointed experts to report upon markets for these products in England, Continental Europe, the Orient, British India, and elsewhere. The results of these investigations were given wide publicity through the departmental publications. So remunerative and satisfactory have these reports proved to those engaged in manufacturing and handling products that enter into foreign trade that the continuation of the appropriation for this special service for the fiscal year beginning July 1, 1908, is earnestly recommended to Congress.

On returning to the United States, the special agent who visited the Lancashire district, the center of Great Britain's cotton-fabric industry, conferred with cotton manufacturers at the principal mill centers in the Southern States, exhibited samples of fabrics made in England which are exported in large quantities, explained methods of manufacture, and supplied general information regarding every branch of this predominant British industry. In like manner special agents who investigated markets abroad in connection with the sale of American leather and its products, especially boots and shoes, conferred with manufacturers at various points, and furnished them with detailed information of a practical character that will undoubtedly be of much value in the preparation of goods for such markets.

With the purpose of extending and promoting sales of American machinery of every description, including the numerous electrical devices manufactured in the United States, the Department will shortly send to Europe experts to report upon the continental field for American machinery and farm implements. The results of their investigation, which it is anticipated will be far-reaching, will be given the usual publicity as soon as received.

COOPERATION BETWEEN THE DEPARTMENT AND TRADE BODIES.

In connection with the promotion of foreign commerce, I should like to see established closer relations between the Department of Commerce and Labor, and especially its Bureau of Manufactures, and the various commercial bodies, chambers of commerce, and boards of trade throughout the country. While such relations could not be as close as those existing between the Handelsminister of Germany and the chambers of commerce of that Empire, which latter are semi-official bodies whose functions and activities are strictly regulated by law, there should be a closer relation than now exists between this Department and the commercial bodies referred to. Such a relationship would certainly be to the advantage of the Bureau of Manufactures, as well as to these commercial bodies, in furthering their joint and several efforts for the advancement of the foreign commerce of the country, and would aid the Bureau in making investigations along most practical lines and covering subjects that are most needed in promoting our trade abroad. The value of the cooperation of such bodies as the commercial organizations of this country, which embrace so many men qualified by practical experience to cooperate with Government agencies, can not be too highly estimated. In pursuance of this theory, I am of the opinion that the creation of some advisory body, formed for the purpose of consulting with and advising the Department, and vice versa, with reference to commercial questions, would be of inestimable value in the promotion of foreign commerce. I have therefore determined to call a conference in Wash-

ington at an early date of representatives of the leading commercial organizations throughout the country, for the purpose of discussing the creation of such an advisory body and drafting rules and regulations for its government. As of decided interest in this connection, the Department has just published a report comparing governmental promotion of foreign commerce in Europe and the United States.

INFORMATION REGARDING FOREIGN TARIFFS.

The demand for information regarding foreign tariffs and kindred matters has increased with the growth of foreign trade. The work of collating and arranging foreign tariffs in form for distribution was carried on as far as permitted by the inadequate sum of money at the disposal of the Bureau for the purpose. During the year the tariff rates of all countries on leather and its manufactures, farm implements, and manufactures of iron and steel were collated and published in separate pamphlets. This segregation of schedules and rates enables those interested in the exploitation of our products readily to ascertain rates of duties imposed by foreign countries on such products, and, it is believed, will be of service to the legislative and executive departments of the Government in the consideration of tariff matters. The Bureau purposes to extend this work to include schedules and rates embracing classifications other than those mentioned. Owing to the importance of the work, the Department earnestly recommends that Congress authorize for the ensuing fiscal year the expenditure of $2,000 in addition to the amount last appropriated, as well as the employment of an additional tariff expert at an annual compensation of $1,600.

FOREIGN TRADE OPPORTUNITIES.

Much valuable information was collected during the year by the Bureau in connection with opportunities for enlarging our sales abroad. Through the Daily Consular and Trade Reports publication is made of information supplied by consular and other officers regarding individuals and firms contemplating purchases in the United States, or desiring to be placed in correspondence with American manufacturers or merchants. Confidential circulars are also issued frequently to various lines of American trade, furnishing detailed particulars of the mercantile wants of foreign business men. In connection with this feature of the work many names, individual and corporate, of those engaged in foreign countries in handling imported merchandise have been collected and tabulated according to the business in which engaged. This information is available to our manufacturers and merchants, and the extent to which it is made use of indicates that its value is appreciated.

Through the reports of the consular service these lists of importers and merchants in foreign countries are constantly expanding, and give promise of becoming a commercial directory of the world, in so far as it would relate to present or probable purchases of American merchandise. As this permanent file or directory becomes more voluminous it is necessary that additional clerks be apportioned to the work from time to time. Whenever it is apparent that further lists of names are desirable pertaining to any branch of trade, the Bureau takes steps to secure the information through the consular officers and compile it for the use of the export interests.

BUREAU OF THE CENSUS.

The annual report of the Director of the Census reveals a most satisfactory progress in the compilation of the reports and investigations assigned to the Bureau by Congress and by the Department. During the year the report on the wealth, debt, and taxation of the United States has been published in a quarto volume of 1,246 pages. Several of the parts were separately published. This report has attracted wide attention and received much favorable comment both at home and abroad. The compilation of the census of manufactures, 1905, has been completed and the results published in two quarto volumes; in addition some twenty-three bulletins relating to the principal industries of the country have been issued. The Bureau is now engaged upon a supplementary analysis of the wage statistics of this census of manufactures. Two bulletins which show statistical facts concerning women and children employed in gainful occupations have been published. The data, never before compiled, were drawn from the returns of the Twelfth Census. These bulletins afford an admirable basis for the special investigation of the conditions surrounding the labor of women and children which was authorized by the last Congress. Annual reports on the statistics of cities, the statistics of mortality, and the statistics of cotton production and cotton distribution and consumption have also been compiled and published as usual.

During the year the Bureau has completed the fieldwork for three important special reports—marriage and divorce, covering the twenty-year period from 1886; the decennial report on religious bodies; and the decennial report on transportation by water. The fieldwork for the special report upon criminal judicial statistics is also well under way. The compilation and publication of these reports will occupy much of the clerical force of the Bureau during the remainder of the fiscal year 1908. In the meanwhile fieldwork will begin upon the remaining reports authorized by Congress, viz, the express business, the census of fisheries, savings institutions, and

the quinquennial report upon the electrical industries. The Director states that there is sufficient work in these reports, together with the annual reports assigned to the Bureau, to keep the clerical force profitably employed until the preparatory work for the Thirteenth Census shall be taken up.

On July 1, the Bureau began the compilation of the biennial Official Register, transferred to it from the Department of the Interior by act of Congress. A radical reform in the arrangement of this publication has been undertaken, with the approval of the Joint Congressional Committee on Printing, which will greatly reduce its bulk and increase its practical usefulness, and at the same time cut the cost of printing it more than one-half. In addition to the Official Register there will be another statistical report on the executive civil service of the United States, similar to Census Bulletin No. 12, published in 1904. It is expected that the Official Register will be issued on December 1, the date fixed by law.

In view of the fact that it has been necessary to discontinue the republication of the Census of 1790 on account of lack of funds, it is recommended that Congress be urged to authorize the continuance of the work out of the printing appropriation for the Census Office for the fiscal years 1908 and 1909.

On June 20, in view of pending action on the constitution of Oklahoma, and the application of the proposed State for admission to the Union, the President, under the authority conferred by section 8 of the act establishing the Department of Commerce and Labor, ordered a census of the population of the Territory of Oklahoma and the Indian Territory. Plans for taking this enumeration were at once formulated by the Director. The chief statistician for population was placed in immediate supervision of the work, with headquarters at Guthrie. An expert chief of division in the Bureau was assigned to assist him in each of the five enumeration districts into which the Territories were divided, and 1,473 special agents were appointed to act as enumerators. As fast as they were commissioned and instructed, these agents began the work of enumeration, which was practically completed on September 10. The enumeration was made as of the date July 1, 1907. It is believed that no census was ever before organized and completed in so brief a period; and in view of the many difficulties encountered, by reason of the uncertainties of boundary lines and the unsettled state of much of the area, the census of Oklahoma must be regarded as a remarkable achievement.

During the past fiscal year a cost accounting system has been put into operation in the Bureau, for the purpose of determining the cost of the clerical labor required for various census inquiries and for different classes of work. This system, an adaptation of the

electrical system of tabulation employed at the Eleventh and Twelfth Censuses, is proving itself to be complete, inexpensive, and flexible. By this means every dollar expended for clerical labor in the Bureau is distributed against some item or items and by those classifications which are most helpful to the Director in organizing and conducting the work of the Bureau. The cost of maintaining this system is scarcely two-tenths of 1 per cent of the amounts distributed.

The Director of the Census draws attention to the rapid approach of the time when active preparation for the Thirteenth decennial census of the United States must be begun, and urges the importance of enacting the necessary legislation at the first session of the Sixtieth Congress. Accuracy, economy, and expedition in connection with that great work will be materially promoted if all the time possible be given the Bureau in which to carefully and fully mature the general plan and methods of the work, and I earnestly urge the immediate consideration of the necessary legislation.

The Director also calls attention to the necessity for early consideration of plans for the proper housing of the army of clerks that will be required in the compilation and tabulation of the census of 1910. There is at present no building available in the city of Washington capable of accommodating this clerical force, nor can any building for the use of the Department of Commerce and Labor be provided for and completed, under the most favorable conditions possible, in time for this emergency. The Director recommends the purchase of the rented property now occupied by the Bureau of the Census, and the construction upon the abutting land of the necessary additional building.

Gratifying progress is reported in the experimental work for the development of a system of mechanical tabulation for the compilation of the Thirteenth Census. Some of the machines are already in successful operation in the current work of the Bureau, and a complete machine shop has been installed in the Census building, where all the mechanical apparatus required for the census of 1910 will be constructed and kept in repair.

BUREAU OF NAVIGATION.

My predecessor's forecast of an exceptionally busy year in American shipyards has been verified. The total output was 1,157 documented vessels of 471,332 gross tons, a volume exceeded by the output of only one year during the past half century. That excess of only 12,000 tons would easily have been overcome had not construction been delayed by strikes during the earlier months of 1907 in the yards on the Great Lakes. Despite this fact, more than half the year's tonnage was launched on the Great Lakes. Of the seaboard output only two steamers, built under the act of 1891, for mail service to

Cuba and Mexico, are destined for foreign trade. The shipbuilding outlook for the current fiscal year is as encouraging as that of a year ago. Barring strikes and delays in furnishing structural steel, the total tonnage built should equal that of the past year. There are, however, no vessels under construction for the foreign trade.

On June 30, 1907, the total documented merchant shipping of the United States comprised 24,911 vessels, of 6,938,794 gross tons, the largest tonnage in our history. In volume, merchant shipping under the American flag is surpassed only by merchant shipping under the British flag. In its types and uses, however, our shipping differs radically from the shipping of other maritime nations. It is almost wholly devoted to domestic transportation, and relatively is far below our strength as a naval power. Over one-third of our tonnage is operated on the Great Lakes, where it is cut off from effective foreign competition, while the trade of our many rivers and canal systems employs another considerable portion, mainly of light-draft vessels.

By comparison with our rank in any other of the great divisions of industrial and commercial endeavor, the position of the United States as an ocean-carrying power is insignificant. It is humble by comparison with the commercial sea power of other leading nations, with which in nearly every other respect we are classed. Even in the discharge of ordinary functions of government we have put ourselves under the protection of foreign flags. Not many months ago it became necessary to dispatch a small force of American troops to Cuba; they were sent under the British flag. More recently it was decided to transfer a powerful fleet of war ships from the Atlantic to the Pacific, and the coal for this fleet is under the shelter of foreign flags, a situation which could not be afforded in actual warfare. Our mails to the Republics of South America are carried almost entirely in foreign steamers, and to Australia and New Zealand they are now entirely so carried. I have alluded to the fact that in the performance of its plain duties the Federal Government had to resort to foreign agencies and foreign protection. There is not to-day another first-class power in a similar position. There is not another, I believe, which if it found itself in that position would allow such conditions to continue longer than until by sufficient expenditure they could be corrected in the shortest possible time. Such expenditures would be as clearly for public purposes as appropriations for the Army, the Navy, the Panama Canal, or the postal system.

From the messages of their Presidents and the reports of their heads of Departments for many years past the American people have become familiar with the trifling share of American vessels in our own foreign carrying trade and with the fact that an American steamship is almost never seen in the world's seaports outside the Caribbean and the Gulf

of Mexico. Last year, for example, only 10.6 per cent of our combined exports and imports were carried in American ships; our vessels registered for foreign trade aggregated only 871,146 gross tons, a fleet equaled in tonnage and greatly exceeded in efficiency by the fleet of one great foreign shipping corporation, while any one of several foreign corporations owns more ocean-going foreign steam tonnage than the entire amount of such tonnage registered under the American flag. The situation is not satisfactory, and for some years past it has been the subject of discussion, which unfortunately has not ended in action. For many years it was entirely true that the energies of the country were so absorbed in its internal development that there was no surplus to devote to expansion of national trade and influence outside our coast lines. It is equally true that such is no longer the fact. The acquisition of insular territory, the construction of a powerful navy, and the investment of American capital abroad are all tokens of a tendency in national growth which will compel our country to become again a sea power, as it was when the Republic was only a fringe of States along the Atlantic seaboard.

Our laws relating to the merchant marine differ in two important respects from the laws of other nations. Practically without exception the laws of other nations permit their subjects or citizens to buy ships in any market, put them under the national ensign, and employ them at least in the foreign trade. Our law restricts American registry and the American flag to vessels built in the United States. That this law is now useless as a measure of protection to American shipbuilders, so far as vessels for the foreign trade are concerned, is amply demonstrated by the fact that for years we have built practically no such vessels under that law. Millions of American capital have been invested in steamships under foreign flags engaged in trade with the United States.

Every maritime nation of consequence gives direct support in some form from the national treasury to merchant shipping. Even Norway has just voted a subsidy for a Norwegian line to Mexico, and Great Britain has advanced $13,000,000 from her treasury to one corporation in order to reassert British primacy on the North Atlantic. The form and amount of support vary among nations, and from time to time with the same nation, but the principle is as fixed as is the principle by which navies are maintained. The United States adopted the principle in the ocean mail act of 1891. Where Federal support was adequate that act has been successful, and where its sagacious advocates declared at the time the support to be inadequate the act has failed. Three years ago, on recommendation of the President, a special commission of Congress made an exhaustive examination of the whole subject of the upbuilding of the merchant marine. I do *not* believe that any further investigation is needed. That commis-

sion decided on a project of support from the Federal Treasury, based in its essentials on the methods of other maritime nations. The bill was approved by a majority of both branches of Congress and had the cordial support of the President and of every Department connected with shipping. It failed to become a law through reasons too recent to need review. The bill was in substance an extension of the ocean mail act of 1891. Its aim was to provide fleets of superior mail steamships available for public purposes. The expenditures proposed were moderate by any reasonable standard of comparison which may be selected, and they were guarded by more than the average legislative restrictions on appropriations.

I am prepared at this time to recommend a measure that shall insure us superior mail communications with the Republics of South America, with Australasia by way of our insular territories in the mid-Pacific, and with the Philippines by way of Japan and China. The special political and commercial reasons for the establishment of such lines of American steamships are so familiar to Congress that a statement of them here would be superfluous. Such a measure involves no new principle and no departure from a system already justified by our own experience and that of other nations. The compensation provided by the ocean mail act of 1891 is inadequate to establish American steamship lines to the great Republics of South America and to the Philippines, Australasia, and Asia. An amendment to that act increasing the compensation for such services to a rate which would be effective is at the present time the most feasible means of promoting our merchant marine. In my judgment the rate of $4 a statute mile outward bound now provided for 20-knot steamers should also be provided for steamships of 16 knots or over on the routes which I have indicated.

The need of better transportation facilities for passengers between Hawaii and the Pacific coast was impressed upon me during a recent inspection trip to the Territory. In consequence of the failure to provide sufficient mail pay at the last session of Congress, our mail line to Australia by way of Honolulu and the Samoan group has recently been abandoned. This abandonment is a serious blow to our political and commercial prestige on the Pacific, but the loss is felt especially by the people of Hawaii. The three steamers of this line made seventeen or eighteen voyages annually between Honolulu and San Francisco and vice versa, and of this regular and comfortable means of travel the people of Honolulu and the islands are now deprived. The importance of knitting to ourselves as closely as possible our insular territory in the Pacific does not need argument. The sentiment in Hawaii in favor of suspending the law which restricts passenger trade between the Territory and the mainland to American vessels is indisputably general and strong. The suspension

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Agreeably to the suggestion in the last report of my predecessor, I have appointed a committee comprising the Assistant Secretary of Commerce and Labor, the Commissioner of Navigation, and the collector of customs at the port of New York to review the act of 1882 governing the transportation of steerage passengers between the United States and foreign countries. This committee will prepare a report which will be transmitted to Congress. The British Government has recently appointed a committee to deal with the same subject. It is obviously desirable that, so far as practicable, there be similarity between the laws of the United States and those of foreign nations dealing with such subjects of common interest. The governments of Europe presumably have as keen and intelligent an interest in the welfare on shipboard of their subjects or citizens who come to or leave this country in the steerage as has the Government of the United States in such persons who may become its citizens. The best results for all, accordingly, are to be obtained by an assimilation of laws where it is feasible.

Progress has been made abroad by the Belgian Government in securing adherences to the treaties relating to salvage and collisions at sea, drafted by the Brussels Conference. A final session of the Conference has been suggested for the early months of 1908, and this Department has expressed to the State Department its desire that the United States be represented. Early action by Congress will be necessary.

STEAMBOAT-INSPECTION SERVICE.

Since assuming the administration of the Department, I have made an earnest effort to improve the efficiency of the Steamboat-Inspection Service, to the end that transportation by water may be made safer, and I have diligently used every means placed at my command by existing law toward the accomplishment of that object. The Steamboat-Inspection Service had its origin in an act of Congress approved July 7, 1838. The Service was reorganized by act of Congress approved August 30, 1852. Since that date, while numerous statutes of a supplementary, amendatory, or special nature, relating to various details of inspection, have been enacted, few innovations or changes, and none of a comprehensive nature, have been made in the general scope and plan of the Service adopted at the outset, over a half century ago. It is believed that in the course of years the efficiency of the Service became much impaired and its usefulness in several particulars greatly diminished—a condition due in part to the inadequacies of the laws, in part to a system of inspection which involved less actual examination than clerical work, and which accordingly appeared strong on paper but was weak in fact, and in part also to a want of proper supervision of the work of local inspectors

and assistant inspectors whereby perfunctory and lax methods escaped correction.

Within the past two years the steamboat-inspection laws have been greatly strengthened and improved by amendatory legislation, and few changes in the substance of the present requirements appear to be needed. What is desired, however, and what is all but absolutely necessary, in order to insure certainty of execution and thorough enforcement, is a systematic revision of the laws from an administrative point of view. The revision needed is one by which various uncertainties in the application of the laws may be removed, and sundry ambiguities and contradictions reconciled, by which the duties and obligations imposed may be clearly defined, necessary authority conferred, and proper responsibility definitely fixed, and by which the entire collection of statutes may be made into a consistent whole. Any body of statutes which has grown by yearly accretion, and which is the result of additions made at intervals to meet the needs of particular occasions, and without special reference to statutes already existing, necessarily presents many practical difficulties of administration, interpretation, and enforcement. Such difficulties inevitably detract from efficiency, and the only cure is careful and systematic revision and codification.

During the last few years, and especially since the investigation and report of the commission appointed as a result of the *Slocum* disaster, there has been a steady and uninterrupted progress toward reform in the methods of the Service. During the spring months I ordered that there should be four annual inspections of passenger-carrying vessels, instead of one, as heretofore; and I also ordered that all assistant inspectors, of both hulls and boilers, should be transferred from the districts to which they were first assigned to other districts, in order that passenger vessels of the United States might have at least one annual reinspection by inspectors other than those by whom they are regularly inspected. I further directed that the examination papers of masters, mates, and pilots should be reexamined, in order that it might be definitely ascertained whether or not there was any carelessness, favoritism, or error involved in the original marking of these officers' papers. So far as I can assure it, there shall be no question of the competency, in every particular, of officers in charge of the passenger-carrying craft of the United States.

These are some of the reforms which I have so far attempted, and there will be no backward step in this matter. In my opinion, an owner or an officer of a passenger-carrying craft of the United States who will take on board passengers when the vessel is unseaworthy or is not fully equipped with life-saving equipment or fire-fighting apparatus, as required by law, is guilty of a crime and should be severely punished.

I am not sure that the transfer of the assistant inspectors from one district to another has brought about every result which I hoped would follow. I am now considering, therefore, the plan of transferring the local inspectors from one district to another; but under existing law that can not be done by way of transfer. It can be done, however, by revoking their appointments to the district in which they are now serving and appointing them to other districts.

It will be my policy while I am at the head of the Department to require peremptorily that the supervising inspectors of the districts and the local inspectors at the different ports shall themselves actually know the condition of passenger-carrying vessels in their districts, and I purpose to hold them absolutely responsible for those conditions, whatever they may be.

In proof of the higher state of efficiency to which the Steamboat-Inspection Service has now been brought the following figures are significant: The total number of accidents to steamboats of all kinds resulting in loss of life during the year was 55, a decrease from the previous year of 10; and the total number of lives lost was 505, an increase over the previous year of 5. Of the 505 fatalities recorded 129 were from accidental drowning and 63 from suicide and other causes which could not be averted, leaving 313 lives lost that come within the preventive scope of this Service.

During the year ended December 31, 1906, 357,851,864 passengers were carried on steamers required by law to make report of the number of passengers carried, an increase of 27,615,905 over the previous calendar year.

LIGHT-HOUSE BOARD.

During the fiscal year earnest endeavor was made for the improvement of the Light-House Service. A standard model of light-house tenders was adopted which not only will be much more efficient, but will result in a saving of from 60 to 70 per cent over the older models. During the fiscal year ended June 30, 1907, contracts were made for the construction of 8 light-house tenders, at $164,000 each.

A standard model for light-vessels was also adopted, which will give similar results, and 5 of these are now under construction, at a cost of $99,000 each, and a similar one for service on the Great Lakes, at a cost of $37,500, making a total for light-house tenders and light-vessels of $1,844,500. At the end of the fiscal year 1907 proposals were invited for the construction of 4 more light-vessels, and contracts were made therefor and approved by the Department on July 17, 1907, at $107,212.50 each, a total of $428,850.

The tender *Mangrove*, which was built in 1897, was altered and improved at a cost of $33,212.95. The total saving in the operation

of this tender due to the alterations recently made approximates $5,000 a year. There are several other tenders, the hulls of which are of iron, which are in such condition as to warrant similar alterations.

The introduction of incandescent oil vapor as an illuminant has been very successful at the stations where it has been tried, first, in the reduction of consumption of oil, and, second, in the tremendous increase of the candlepower of the lights. It is most desirable that this system or some other equally efficient illuminant be introduced in all lights, and this will be done as rapidly as practicable if necessary funds are available.

Three light-ship automatic gas and whistling buoys were accepted by the Light-House Board for trial and were located at Point Judith, off Gedney Channel, New York Harbor entrance, and off Cape Henry. They are highly appreciated by all navigators of those waters and are valuable aids to navigation. They are patented articles, and therefore more expensive than would otherwise be the case, and they have not been purchased.

The Board has not been able for several years to meet the demands made upon it from every district for increased buoyage, and whatever reserve supply there has been is entirely exhausted.

The work under each of the appropriations made by act of Congress approved March 4, 1907, is progressing satisfactorily. In some cases, such as the breakwater at Milwaukee, Wis., construction will proceed upon the completion of the work under cognizance of the Chief of Engineers of the War Department, while in some others, like Ragged Point, Virginia, further work awaits an additional appropriation.

The necessity for such legislation as will provide for an increase in the number of light-house districts still exists, and attention is invited to the statement made in the annual report of the Board for 1907 regarding the need for three additional light-house districts.

The Board recommends that the number of light-house keepers authorized be increased from 1,650 to 1,750; that their average yearly pay be increased from $600 to $700, and that the appropriation for salaries of light keepers be so increased that they may receive an average of 10 per cent more next year than was received this year. The statement on the subject made in the preface of the Board's annual report is commended to the favorable consideration of Congress.

The estimates submitted for the maintenance of the Light-House Establishment contain material increases in the general appropriations for the protection of commerce, in order that the light-houses and light-vessels may be kept in thorough repair, buoys replaced when necessary, and the light-house depots kept supplied with needed

material, placed for immediate use; and that the Board be enabled to place new buoys to meet the demands of increased commerce. That all this may be done it is recommended that favorable consideration be given the estimates submitted. The large increase in the cost of labor and material necessitates a corresponding increase in appropriations.

The insular possessions of the Government with which commercial relations are maintained need special consideration, and suitable appropriations are recommended to provide that aids to navigation may be established or maintained in Porto Rico, Hawaii, Guam, the Midway Islands, and American Samoa.

The legislation of the last Congress providing for the establishment of private aids to navigation is appreciated, and under the regulations issued in February last some 100 such aids have been authorized. It has been thus far unnecessary to invoke the prohibitory action made possible by the passage of the act.

The recommendation made last year, that it be made unlawful for any vessel to anchor in any navigable waters of the United States so as to obstruct or interfere with range lights or other aids to navigation established by the United States in such waters, is renewed.

BUREAU OF FISHERIES.

The Bureau of Fisheries has most varied and important relations to the fishing industry, notwithstanding that, with a few exceptions, it exercises no legislative or executive functions regarding the fisheries, either in the interior waters, on the coasts, or on the high seas. The efforts of the Bureau are addressed to the stocking of waters with food fishes; to the studying of the waters and their inhabitants; to the investigation of the methods, apparatus, and condition of the commercial fisheries, and to the giving of expert advice to States, corporations, and individuals on all matters affecting the cultivation, capture, preparation, and sale of water animals. It is gratifying to note the growing importance of this Bureau and the increasing dependence placed on it by the general public. Close relations are maintained with the fishery authorities of all the States, and on the Bureau devolves the administration of the extensive fisheries of Alaska.

PROPAGATION AND DISTRIBUTION OF FOOD FISHES.

The fish-cultural work is designed to repair the effects of overfishing and to stock waters previously destitute of fish life, with the aim of providing a wholesome and cheap food in great variety. The operations extend into every State and Territory, and are increasing in volume and importance each year, new hatcheries being estab-

lished, new egg-taking regions exploited, new methods adopted, and new species handled. The magnitude and scope of the work are designed to meet the enormous drain on the aquatic resources and the growing demands for food and game fishes for stocking public and private waters.

The total output in 1907 was over 2,500,000,000 fish and eggs—nearly 600,000,000 more than for the year 1906, which had the largest previous record. The conspicuous increases were in such valuable species as pike perch, yellow perch, white perch, blueback salmon, lake herring, grayling, shad, striped bass, cod, and lobster. There was a fair yield of pollock and a comparatively large output of haddock, which species were not hatched in 1906. On the other hand, the production of whitefish, chinook and silver salmon, and steelhead trout fell somewhat below that for last year.

The marine hatcheries were especially successful, the cod work being characterized by the trial of the Norwegian method with such encouraging results that it will doubtless be adopted at all the marine stations, while the lobster work at Boothbay Harbor also was most satisfactory. The propagation of yellow perch and white perch, undertaken by the Bureau for the first time only a few years ago, has opened such a promising field that the results seem to be limited only by the funds and equipment available for the work. The experimental propagation of striped bass on the Pacific coast in 1907 gives promise of much success. The output of blueback salmon owes its increase to the operations at Yes Lake, Alaska, which has proved a most desirable location. Efforts to collect rainbow-trout eggs at the Baird, Cal., station produced the most satisfactory eggs handled during the season and indicate that this station will prove an important source of supply for other hatcheries.

The conditions prevailing in the shad fishery of the Chesapeake region for the past several years remain the same, and the decline continues to affect the operations of the hatcheries. A larger collection of eggs than usual was obtained this year, however, for the reason that heavy winds blew out the pound nets and prevented fishing in the lower waters of the bay, permitting a good run of fish in the Potomac and the Susquehanna.

The demand for game fishes for stocking the smaller waters of the interior in the case of some species exceeds the supply. The total number of applications in 1907 was 6,346, which is 540 more than were received in 1906. This number has grown steadily from 2,755 in 1900, and represents the disposition of about 10 per cent of the output for the past year. Practically all the fresh-water fishes are thus distributed except those returned to the streams from whose overflow waters they have been taken. The marine and anadromous fishes and

the output of the hatcheries on the Great Lakes, which are all commercial species and constitute the remaining 90 per cent of the total output, are distributed directly by the Bureau or through the State authorities.

The Commissioner reports that the operation of the new interstate-commerce law and the railroad-rate laws of various States has greatly increased the cost and difficulty of the Government's distribution of fishes. Where formerly railroads granted free transportation to cars and messengers, or charged but a moderate rate, it is now necessary in some States to pay full fares, and in the detached messenger service to ship the fish by express, while it is an unsettled question whether or not the messengers may be admitted to the express cars to care for the fish. It is thought that the cost of transportation of fish during the next year under these laws will be practically twice what it has been heretofore.

BIOLOGICAL INQUIRIES.

The study of the habits, migrations, spawning, diseases, etc., of aquatic animals, and the almost equally important study of the creatures that serve as food or act as enemies to those of economic value, conducted from year to year as a fundamental branch of the work in behalf of the fisheries, was continued in 1907 upon the usual lines, in several cases being supplemented by direct experiment with immediate commercial application.

The effort to develop a commercial process for fattening oysters artificially has now but one important problem awaiting solution, namely, that of materially increasing the output of the experimental claire. The oysters fattened by this method are as fine as any on the market. Experiments in Louisiana for the development of the oyster beds, undertaken at the request of the Louisiana Shellfish Commission, have been continued with success, in one instance resulting in the establishment of an industry which already yields rentals exceeding the total expenditure of the Bureau in the entire State. Assistance has been rendered also in a survey of the oyster beds of Maryland, in accordance with an act of Congress and the request of the governor, and this survey, in which the Coast and Geodetic Survey is cooperating, is expected to be most complete, and an important step toward the restoration of Maryland to her original position as the first oyster-producing State.

The work upon the experimental sponge plantations in Florida, which has been pursued by a series of disasters, is nevertheless yielding results, and it is believed that by the end of the next fiscal year it will be possible to recommend a commercial system of sponge culture.

The experiments in terrapin culture record little progress because of the slow rate of growth of the animals.

The marine biological laboratories at Woods Hole, Mass., and Beaufort, N. C., were occupied as usual and their facilities employed in scientific investigation, especially of the fauna of the surrounding waters. The cruise of the *Albatross* in the North Pacific for deep-sea exploration was concluded in December. Studies of the fishes and investigations bearing on the fisheries of several localities in New England and the Middle West occupied field parties sent out during the year.

ALASKA SALMON FISHERIES.

The new laws governing the fisheries of Alaska did not become operative until so late in the fishing season of 1906 that they were without effect during that year, and the annual inspection revealed practically unchanged conditions, though the several branches showed fluctuations in output. The pack of canned salmon was unusually large—the best since 1903—and the goods brought remunerative prices, making the season a prosperous one. The agitation concerning the meat-packing plants in Chicago led to some distrust in European markets of American canned salmon, but the exceptional care and cleanliness which prevails in the salmon-packing establishments asserted itself to dispel the prejudice, and the demand in foreign markets soon became normal. The earthquake and fire in San Francisco also affected the salmon industry, through the destruction of vessels and the dispersal of cannery employees. The number of canneries operated, however, was greater than in the previous year, being 47, against 42 in 1905. The total pack of all species was 2,246,989 cases, valued at $7,896,392.

The pickling of salmon, the oldest branch of the salmon industry, is declining, the mild-cured product now being more in demand. The salteries in 1906 yielded an output of 16,926 barrels and 3,389 half barrels, worth $139,838. Ten firms and individuals engaged in mild curing, putting up 1,294,900 pounds of salmon, worth $67,007, in their initial season.

Four hatcheries were operated in Alaska in 1906, three by different firms and one by the Bureau of Fisheries. The first season for the latter (1905–6) resulted in an output of 6,638,550 sockeye fry. The output of all the hatcheries that season amounted to 104,817,962 sockeye and 1,837,000 coho fry. In the fall of 1906 the hatcheries contained 205,909,200 sockeye, 30,000 coho, and 182,000 steelhead eggs, of which 58,210,000 of the sockeyes and all the steelheads were in the Government hatchery at Yes Lake. The Bureau of Fisheries has located a second hatchery on Afognak Island, and the work of construction was well under way at the close of the year.

As a result of the inspection of 1906, several recommendations have been submitted, viz, that Eyak River and Lake, on Prince William Sound, be declared a salmon-spawning reservation, to permit the reenforcement of adjacent waters; that the salting of salmon bellies by processes that do not make use of any other part of the fish be prohibited; that Indians be prohibited from taking salmon with gaff hooks in the Chilkoot and Chilkat rivers for sale to the canneries; and that Wood River be closed to commercial fishing and a salmon hatchery be established on the chain of lakes at its head.

INTERNATIONAL RELATIONS.

At the request of the Department of State, an assistant of the Bureau was dispatched to Newfoundland, as in the previous year, to note the progress and condition of the American herring fishery on the so-called "treaty shore" and to keep the Government informed regarding the developments under the modus vivendi. The naval tug *Potomac* was placed at the disposal of the Bureau's representative, and remained on the grounds during the entire season, which extended from the latter part of September to the middle of January. The American fleet consisted of 62 vessels, in addition to which 4 Canadian vessels were chartered by American fishermen. There were also engaged in the fishery 27 Canadian and 55 Newfoundland vessels, the latter mostly small craft. The fishery was prosecuted in practically the same manner as in the previous year, with the exception that a few purse seines were used early in the season. There were employed on the American vessels, in addition to their regular crews, 780 native fishermen shipped outside the 3-mile limit. The catch was large, although the weather was unusually severe. The quantity of herring taken by the American fleet amounted to 72,309 barrels of frozen and salted fish, having a value of approximately $392,340. Six of the fleet were lost.

NEW BUILDING AND PUBLIC AQUARIUM.

The Commissioner of Fisheries again calls attention to the inadequate and obsolete quarters occupied by the Bureau of Fisheries in Washington, and emphasizes the necessity for a new office building, with special laboratory facilities that are now entirely lacking. Much of the work of the Bureau in the interests of the fisheries and fish-culture requires for its successful accomplishment fresh and salt water tanks in which experimental investigations may be conducted; the absence of such tanks at headquarters has greatly retarded progress, and in some cases has necessitated the indefinite postponement of important inquiries.

In conjunction with the desired new office building there should be maintained a modern aquarium, which would be a place of great

public interest and educational value and, at the same time, of practical utility to the Bureau. The facilities already possessed by the Bureau for stocking and operating such an aquarium would permit its maintenance at a trifling cost.

ALASKAN FUR-SEAL SERVICE.

Although the Pribilof Islands—the home of the Alaskan fur seal—were surrounded this summer by a fleet of approximately 50 pelagic schooners, all of which were actively engaged in taking seals in the water, no instance was discovered of the unlawful entry of any of them into the territorial waters of the United States. There were, however, several occasions on which small boats from these schooners came within 3 miles of the islands for the purpose of killing seals, thereby rendering them, as well as the schooners to which they belonged, liable to seizure under our laws. For this latter offense—that of having small boats taking seals within the territorial waters of the United States—three schooners were seized by the revenue cutters *Manning* and *Perry*, one of which was subsequently released on the ground of insufficient evidence, while the crews of the remaining two were taken to Valdez, and such of them were convicted as were concerned in the offense for which they were apprehended. The other members of the crews were released. Another schooner was seized by the revenue cutter *Rush* for a violation of the provisions of the Paris award. The revenue-cutter patrol about the islands was active and efficient.

The pelagic fleet was composed, approximately, of 35 schooners under the Japanese flag and 15 schooners from British Columbia. The latter vessels began killing seals on August 1, and continued operations until October, being restricted by the terms of the Paris award from taking seals in Bering Sea before August 1, or within 60 miles of the Pribilof Islands. The Japanese fleet, however, being bound by no international agreement, is not restricted to any special time or place for taking seals in the water, and may hunt them up to the 3-mile limit surrounding the islands, and at any time in the year. Japanese schooners were visible almost daily from the islands, as many as 23 schooners and over 30 small boats being seen from the shore in one day, although, as before stated, no schooner is known to have entered unlawfully the 3-mile limit.

As the result of this pelagic activity, which is hardly more than a repetition of the practice of former years, the breeding females in the Pribilof herd, which form the bulk of the schooners' catches, have been reduced to approximately 50,000. This reduction promises a speedy commercial extinction of this valuable animal.

Notwithstanding the deplorable decrease in breeding females just mentioned, it is gratifying to report that not only has the decrease

in adult male life noted during the last few years been checked, but the breeding rookeries last summer showed an actual increase in breeding males. On St. Paul in 1907 there were 1,183 stationed bulls on the rookeries as against 1,244 in 1906, and, in addition, nearly 200 young bulls, bringing the total in 1907 beyond what it was the previous year. On St. George an actual increase in stationed bulls was noted—221 in 1907 as against 208 in 1906. This increase in male life is due entirely to the regulations of this Department enforced for the past four years, reserving young males for breeders, and is interesting in that it shows what could be done with the seal herd under proper management on land were no seals killed in the water.

During the season ended July 31, 1907, there were taken on the Pribilof Islands 15,000 fur-seal skins, of which 12,384 were shipped by the lessee from St. Paul and 2,580 from St. George. Of the whole number taken, there were retained on the islands 35 skins taken by the lessee which were under or over the weights prescribed by the Department's regulations.

During the period from May 12 to July 29, 1907, there were driven on St. Paul Island 16,089 individual seals, of which 10,966, or 68 per cent, were killed. On St. George, from June 7 to July 29, 4,636 animals were driven and 2,072, or 44 per cent, killed. The quota of 15,000 skins was obtained on both islands before the legal end of the season, and it is estimated that, had sealing been carried on until July 31, at least 1,500 more skins could have been secured. There were reserved for breeding purposes, as usual, 1,000 2-year-old and 1,000 3-year-old males, the object being accomplished by shearing the heads of the animals with sheep shears, the mark thus made being readily apparent during the entire summer. In the fall, killing of these animals is avoided by restrictions on the sizes of seals to be taken for food for the natives.

There were killed on St. George during the last winter 366 blue and 8 white foxes, the number representing a decrease of 90 blue foxes from the catch of 1906. This decrease, according to the reports, is due more to an open winter, which was not favorable for good trapping, than to an actual lessening of the number of foxes. No foxes were taken on St. Paul and little increase has been noted in the number there.

COAST AND GEODETIC SURVEY.

At the beginning of this calendar year the Coast and Geodetic Survey completed a centenary of existence. The wise prevision of Jefferson caused him to recommend to Congress that a detailed survey of the coasts be undertaken in the interests of commerce and defense, and Congress accordingly passed the act creating the Coast Survey in 1807. The most distinguished scientific men of the time

were called upon to devise or to approve the principles on which the work was to be carried out, and the operations of the Bureau for a hundred years have upheld the high standard set in this well-planned beginning. The work of the Bureau has received the indorsement of Congress, which has extended the field of its duties to keep pace with the increasing greatness and the extension of the jurisdiction of the United States.

Two officers of the Survey attended the meeting of the Fifteenth General Conference of the International Geodetic Association, at Budapest, Hungary, in September, and important business was transacted. Work at the international latitude observatories at Gaithersburg, Md., and Ukiah, Cal., maintained by the association under the direction of the Superintendent, was continued during the year.

An officer of the Survey continued on duty as a member of the Mississippi River Commission, as required by law, and other officers served on the boundary surveys mentioned above.

The results of the operations in the field are promptly prepared at the office in Washington and at the suboffice in Manila and issued in the usual forms, such as charts, coast pilots, and tide tables.

The Superintendent reports the following routine and special work performed during the year:

Hydrographic work was done in seven States and Territories and in Porto Rico and the Philippine Islands.

The primary triangulation along the Pacific coast was completed in Oregon and Washington, and observations were made at a number of old triangulation stations in the region between Monterey Bay and Point Arena to determine the effect of the San Francisco earthquake of April, 1906, on this work. This interesting investigation was almost completed and an actual displacement has been demonstrated.

Astronomic observations were made in eighteen States and Territories and the standard levels were extended in California, Idaho, Montana, Nevada, Ohio, and Utah.

The demand for surveys in Alaska has been met by using all the resources of the Bureau available for the work, and good progress has been made. As provided in the convention between the United States and Great Britain (signed April 21, 1906), a point on the one hundred and forty-first meridian of west longitude was determined and the demarcation of this portion of the boundary is in progress. The demarcation of the boundary in southeastern Alaska has also progressed as rapidly as conditions permitted.

The remonumenting of the international boundary between the United States and Canada along the northern border of Vermont was continued, and the final inspection of the completed work along the same boundary west of the Rocky Mountains is in progress. The

United States is represented in this work by the Superintendent of the Coast and Geodetic Survey as Commissioner, acting under the direction of the Secretary of State.

The charting of harbors and waters in the Philippine Archipelago was continued in cooperation with the insular government, and good progress was made. Twelve new charts of this region were published and special effort has been made to extend this important work as rapidly as possible.

The magnetic survey was continued and observations were made in thirty-four States and Territories, including Alaska and the Philippine Islands, and magnetic observations were also made at sea in the Atlantic and Pacific oceans. The work at the magnetic observatories in Alaska, Hawaii, Kansas, Maryland, and Porto Rico was continued.

Continuous records of tidal fluctuations were obtained by means of self-registering gauges at 11 stations, including 1 station in Hawaii and 2 in the Philippine Islands.

The amount appropriated for the Coast and Geodetic Survey for the fiscal year 1907 was $848,915, of which $210,245 was for manning and equipping the vessels of the Survey, $30,000 for repairs and maintenance of vessels, and $50,000 for office expenses. The remainder of the appropriation was divided between expenses of parties in the field ($257,900) and salaries of field and office forces ($300,770).

In addition to these sums the appropriations for marking the United States and Canada boundary and for locating and marking the Alaska boundary, made to be expended under the authority of the Secretary of State, are disbursed under the direction of the Superintendent, as Commissioner, by the disbursing agent of the Coast and Geodetic Survey, as special disbursing officer of the State Department.

BUREAU OF STANDARDS.

Briefly, the functions of the Bureau of Standards are, first, to encourage and make possible uniform and exact measurements wherever they are made, by the improvement of standards of measurement, measuring instruments, and methods of measurement; second, to promote the intelligent use of materials in the arts and industries by the determination of such physical properties as are of importance in their manufacture, distribution, or use.

The testing and investigation of materials depends to such a large extent upon standards of measurement, measuring instruments, power, mechanical equipment, and experts in physics and chemistry that the Bureau has striven to provide these necessary and indispensable facilities before undertaking the work in connection with materials; nevertheless, the demands for this work have been so great that the Bureau was compelled to take it up in a very limited way almost at the

beginning. During the past year there has been an unprecedented increase in the demands for the Bureau's services in connection with the testing of materials, due principally to requests from the Executive Departments in connection with the purchase of supplies. This increase is felt throughout the Bureau.

For the purpose of securing uniformity throughout the country in the use and inspection of commercial weights and measures, and with the view of making the Bureau more useful to the public, the division of weights and measures has brought about an organization of State and city officials having such matters in charge. The third annual conference of these officials was held at the Bureau of Standards during the month of May, with a larger number of delegates than at any previous meeting. In cooperation with these officials the Bureau is awakening an interest throughout the country in the use of correct weights and measures in trade, a question which, notwithstanding its importance, has heretofore, except in a few localities, received but little attention. The division mentioned has compared a large number of the standard weights and measures used by local officials, manufacturers, and shippers, with the standards of the Government; also many precision standards of length, mass, and capacity for scientific and educational institutions, engineers, manufacturers, and the various Executive Departments. Tests of materials which depend principally on measurements of weight, length, or capacity are made by this division; also many inquiries pertaining to weights and measures are received and answered as far as possible.

The electrical division of the Bureau is especially engaged in the development of standards, methods of measurement, and problems in connection with electrical measurements of resistance, electromotive force, current, capacity, inductance, magnetism, and illumination. An extended investigation of the standards of electromotive force and the methods of their preparation has been made, the results of which were highly satisfactory and have shown the high degree of accuracy with which the standard cell may be reproduced. Investigations have also been made or are in progress as to the ratio between certain of the electrical units, the absolute measurement of resistance, and the various methods of measuring magnetic properties of materials. When it is understood that the value of electrical measurements, whether scientific or commercial, depend upon proper solutions of these problems, their importance can be readily understood.

A considerable number of electrical instruments have been tested or compared with the standards of the Bureau. The electrical properties of many materials have been determined, and, as in other divisions of the Bureau's work, every effort is made to make the division

useful to the electrical industries of the country and to scientific laboratories engaged in electrical work.

While photometry has to do with measurements of light, so many of the problems met with are in connection with electrical illumination that this work is included in the electrical division for the present. In addition to the testing of standards of illumination, various investigations have been made and several new forms of apparatus have been developed, with the view of placing photometry upon a more exact basis. Aid has been rendered to various manufacturers in the equipment of laboratories for the testing of light sources, and much has been done to bring about uniform specifications for the purchase of incandescent lamps. The cooperation of the Bureau was sought in a conference between Government engineers and lamp manufacturers, which resulted in specifications that have been adopted by most of the Departments of the Government. This is but one of the many instances where the Bureau has given assistance to the Government in the preparation of suitable specifications for the purchase of supplies.

In thermometry, pyrometry, and heat measurements the Bureau is striving to meet practically the same conditions that are found in every branch of its work. This division has completed a study of the standards on which are based the standard temperature scale from 0° to 100° C., and has determined the melting points of certain metals which are fundamental points in the measurement of high temperatures. An investigation of methods of measuring high temperatures is also in progress.

Many engineers and representatives of industrial plants have visited the laboratories of the Bureau for the purpose of studying the methods of high-temperature measurements, securing information which is not only useful but extremely essential in many important industrial processes, such as the hardening of steel, casting of metals, burning of porcelain, etc.

The testing done in the division of thermometry and pyrometry during the year includes about 10,000 thermometers of various kinds, besides optical pyrometers, electrical-resistance thermometers, thermocouples, and other instruments used for the measuring and controlling of temperature. Tests have been made of the physical properties of lubricating oils and the calorific value of fuels as a basis for the award of contracts and to determine the fulfillment of specifications for materials furnished to the several Departments of the Government.

The work of the optical division includes spectroscopy, polarimetry, radiometry, and interference methods of measurement. That relating to spectroscopy has been confined principally to the investi-

gation of light sources suitable for use in polarimetry, reference standards of wave lengths, absolute standards of length, and interference methods of measurement. The luminous properties of incandescent helium gas has been investigated with a view to determining its value as a primary standard of illumination. Tests of optical instruments have been made and the optical properties of materials determined.

Polariscopic measurements find their principal application in the analysis of sugar in sugar refineries and in the customs service. Investigations have been made, or are in progress, with a view to improving the standards, the measuring instruments, and the sources of light used. In addition, the Bureau tests these standards and instruments for laboratories, sugar refineries, the customs service, and the public. Control samples of sugar are tested daily for the principal custom-houses.

An examination has been made of the various instruments used in the measurement of radiation, and while the results of these investigations do not meet with the immediate practical application that is found in some other cases of the Bureau's work they are important as aids to scientific work and indirectly of great value to many of the industries.

Investigations are being made with a view to the application of interference methods of measurement wherever they are applicable and where it is desirable to increase the order of accuracy.

Generally the work in connection with standards of measurement or the testing of materials falls within the domain of physics; however, questions often occur as to the purity or composition of materials which call for chemical analyses and investigation. The chemical division of the Bureau has endeavored to meet these conditions. It also determines important chemical constants, and several investigations to this end have been completed or are in progress.

At the request of the steel and iron industries the chemical division has undertaken the analysis and distribution of standard steel and iron samples which are used by these industries to standardize and check their own analyses from time to time. The demand for these samples is constantly increasing.

It has been impossible thus far to assign to the testing and investigating of engineering instruments the space, equipment, and assistance commensurate with their importance. However, the Bureau is in a position to test standard water meters, gas meters, speed indicators, pressure gauges, anemometers, indicator springs, and many varieties of testing machines. It is carrying on investigations relating to the behavior of such instruments under varying conditions and the improvement of their accuracy when desirable, and otherwise encouraging their use. It cooperates with municipal authorities in the

establishment of their testing plants, verifies their standards, and advises the officials directly in charge of such work.

Finally, the relation of the Bureau's work to that of all laboratories engaged in scientific investigation must not be overlooked. Such investigations are rarely made that do not involve measurements, usually of the highest order of accuracy, and frequently a precise knowledge of the material used is of equal importance. If each individual were compelled to undergo the process of establishing and investigating his standards, more time would often be consumed than that necessary for the problem in hand. In many cases it could not be done at all, since it would involve unusual equipment as well as access to the primary standards of the Government.

OFFICE OF THE SECRETARY.

APPOINTMENT DIVISION.

The work of this division is well up to date and in a satisfactory condition. As opportunity arises the division continues to take up, with a view to improvement in methods, particular matters that come under its jurisdiction. Among the improvements inaugurated during the past year are (1) the submission of reports concerning the efficiency of all employees of the Department; (2) the arrangement of the mass of papers received from the Treasury Department in connection with the bureaus transferred on July 1, 1903; (3) the adoption of uniform methods of appointment of shipping commissioners and of the subordinate employees of the commissioners' offices; (4) new examinations for appointment in several of the bureaus, and arrangement of the resulting eligibles so as to enable the Department to make selections of persons possessing a wide range of qualifications, and with special reference to their fitness for the particular grade of work to which they are to be assigned; (5) the promulgation of regulations to govern appointments, promotions, etc., in the field service of the Bureau of Fisheries; (6) the reclassification of the lights of the Light-House Establishment on the basis of the qualifications necessary in their keepers, with a consequent revision of the eligible registers and of the civil-service regulations applicable to the Light-House Service, omitting many details of procedure which had a tendency to encumber the files without any compensating advantage, and (7) the promulgation of new regulations governing leaves of absence, with a view to simplification of methods and elimination of unnecessary duplication of work.

There are approximately 10,553 positions under the jurisdiction of the Department, of which 1,876 are statutory and 8,677 are not statutory; 1,633 are within the District of Columbia and 8,920 are outside the District. The increase over last year in the number of

positions is 1,057. These figures do not include many laborers, mechanics, and others who are temporarily or specially employed.

There have been a number of cases, limited chiefly to low-salaried positions requiring the qualifications of stenography and typewriting, in which considerable difficulty has been encountered in obtaining persons willing to accept positions offered. Competent male stenographers and typewriters readily find employment at salaries higher than those paid in the lower grades of the Government service, and naturally are unwilling to accept appointment except upon definite promise of promotion, which is usually impossible and always inadvisable. This condition may be remedied by the increase in pay of all the lower-grade positions requiring qualifications of stenography or typewriting, or both, to at least $900 per annum. In several of the bureaus stenographers and typewriters are offered as little as $720 per annum, and in one Bureau typewriters have been appointed at $600 per annum. These salaries are too low to attract competent persons.

The law prohibiting transfers from one Executive Department to another until after three years of service has not worked an improvement. The bright young man coming into the service at a small salary is largely influenced in his acceptance of the place by the hope of reasonably early promotion. In many offices he finds that there is but little opportunity. He can not afford to wait three years for a transfer to some office where the chances are better, and he either leaves the service at the beginning of his usefulness or drifts into hopeless mediocrity. While it is probably true that some offices and Departments have suffered because of frequent transfers, it is believed that the proper remedy is a uniform reclassification of the service, as recently recommended by the Committee on Department Methods, and that any direct prohibition against transfers beyond the period of six months originally fixed by the civil-service rules, while affording apparent relief, does not remove the cause and can not be regarded as the correct solution of the difficulty. The nucleus of this Department was formed by transfers from other branches of the service, and it would probably have been a severe drawback had the transfer limitation then been in effect. Were all the Departments classified on a uniform basis, much, if not all, of the instability of the force in certain Departments and offices would disappear.

APPROPRIATIONS AND DISBURSEMENTS.

The itemized statement of the disbursements from the contingent fund of the Department of Commerce and Labor for the fiscal year ended June 30, 1907, will be transmitted to Congress in the usual form.

The following table shows the total amounts of all annual appropriations for the various bureaus and services of the Department of

Commerce and Labor for the fiscal year ended June 30, 1907, of all appropriations made for public works in the various services of the Department, and the balances of appropriations available July 1, 1906, for public works which, under the law, may be disbursed without regard to any particular fiscal year, and of all permanent indefinite appropriations:

	Annual appropriations, 1907.	Appropriations for public works.	Permanent indefinite appropriations.	Totals.
Office of the Secretary of Commerce and Labor	$246,889.80			$246,889.80
Bureau of Corporations	185,920.00			185,920.00
Bureau of Manufactures	78,280.00			78,280.00
Bureau of Labor	172,570.00			172,570.00
Light-House Board	46,640.00			46,640.00
Light-House Establishment	3,906,000.00			3,906,000.00
Light-houses, beacons, fog signals, etc.		$2,992,883.98		2,992,883.98
Bureau of the Census	1,232,247.49			1,232,247.49
Bureau of Statistics	70,310.00			70,310.00
Office of the Supervising Inspector-General, Steamboat-Inspection Service	12,940.00			12,940.00
Steamboat-Inspection Service			$471,549.27	471,549.27
Bureau of Navigation	28,660.00			28,660.00
Shipping service	7,000.00		61,531.32	68,531.32
Rent of quarters for shipping commissioner, San Francisco, Cal	2,100.00			2,100.00
Services to American vessels			11,583.05	11,583.05
Refunding penalties or charges erroneously exacted			3,877.09	3,877.09
Bureau of Immigration and Naturalization	132,550.00			132,550.00
Enforcement of the Chinese-exclusion act	500,000.00			500,000.00
Expenses of regulating immigration			1,880,544.73	1,880,544.73
New island near Ellis Island, N. Y., and immigrant stations at Ellis Island and San Francisco, Cal		496,961.34		496,961.34
Bureau of Standards	170,947.87			170,947.87
Coast and Geodetic Survey	[a] 1,023,677.56			1,023,677.56
Bureau of Fisheries	631,620.00			631,620.00
Fish hatcheries, steam launches, etc.		164,298.23		164,298.23
Salaries agents at seal fisheries in Alaska	11,430.00			11,430.00
Supplies for native inhabitants, Alaska	19,500.00			19,500.00
Miscellaneous:				
Judgments, Court of Claims	3,874.69			3,874.69
Judgments, United States courts	260.52			260.52
Reliefs, refunds of fines, etc.	4,677.47			4,677.47
Totals	8,488,094.90	3,654,143.55	2,429,085.46	14,571,323.91

[a] Of this amount, $125,131.09 is to be expended without regard to fiscal year.

The disbursements by the disbursing clerk of the Department of Commerce and Labor during the fiscal year ended June 30, 1907, are set forth in the following table, which shows the disbursements for each quarter and the total amount disbursed during the fiscal year for each appropriation from which disbursements were made:

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
OFFICE OF THE SECRETARY.					
Salaries, Office of Secretary of Commerce and Labor, 1906	$12,137.99				$12,137.99
Salaries, Office of Secretary of Commerce and Labor, 1907	23,546.96	$35,300.80	$35,590.93	$42,571.00	136,949.69
Contingent expenses, Department of Commerce and Labor, 1906	10,260.54	1,300.11			11,560.65
Contingent expenses, Department of Commerce and Labor, 1907	5,318.54	17,394.61	17,458.87	14,920.44	55,092.46
Rent, Department of Commerce and Labor, 1906	2,155.82				2,155.82
Rent, Department of Commerce and Labor, 1907	5,036.62	8,054.95	7,854.96	7,754.94	28,701.47
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1906	2,294.30	665.79			2,960.09
Salaries, agents at seal fisheries in Alaska, 1907	182.50	2,250.83	1,460.00	1,283.33	5,176.66
Total					254,784.83
BUREAU OF CORPORATIONS.					
Salaries, Bureau of Corporations, 1906	4,941.78				4,941.78
Salaries, Bureau of Corporations, 1907	9,924.39	15,144.45	14,513.32	16,811.43	56,393.59
Salaries and expenses, special attorneys, examiners, etc., Bureau of Corporations, 1906	6,111.84	24.20			6,136.04
Salaries and expenses, special attorneys, examiners, etc., Bureau of Corporations, 1907	12,307.51	20,223.93	18,438.96	22,314.68	73,285.08
Total					140,756.49
BUREAU OF MANUFACTURES.					
Salaries, Bureau of Manufactures, 1906	1,126.69				1,126.69
Salaries, Bureau of Manufactures, 1907	4,027.47	6,234.58	5,927.58	6,332.51	22,522.14
Salaries and expenses, special agents, Department of Commerce and Labor, 1906	434.75				434.75
Salaries and expenses, special agents, Department of Commerce and Labor, 1907		1.56	2,614.40	1,600.00	4,215.96
Collating tariffs of foreign countries, 1906	381.95				381.95
Collating tariffs of foreign countries, 1907	200.00	326.67	518.67	960.00	2,005.34
Total					30,686.83
BUREAU OF LABOR.					
Salaries, Bureau of Labor, 1906	8,944.11				8,944.11
Salaries, Bureau of Labor, 1907	17,726.42	26,592.18	26,826.47	30,697.21	101,842.28
Miscellaneous expenses, Bureau of Labor, 1905	1,000.00				1,000.00
Miscellaneous expenses, Bureau of Labor, 1906	4,586.49	712.60		1,950.00	7,249.09
Miscellaneous expenses, Bureau of Labor, 1907	8,109.27	17,603.66	15,821.51	15,224.89	56,759.33
Library, Bureau of Labor, 1906	45.85				45.85
Library, Bureau of Labor, 1907	203.71	21.07	123.84		348.62
Stationery, Bureau of Labor, 1906	339.76				339.76
Contingent expenses, Bureau of Labor, 1906	628.48	.10			628.58
Postage to postal-union countries, Bureau of Labor, 1906	8.15				8.15
Total					177,165.77

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
LIGHT-HOUSE BOARD.					
Salaries, Office of Light-House Board, 1906	$3,732.49				$3,732.49
Salaries, Office of Light-House Board, 1907	7,563.29	$11,783.69	$11,347.63	$13,501.04	44,195.65
Total					47,928.14
BUREAU OF STATISTICS.					
Salaries, Bureau of Statistics, 1906	6,465.98				6,465.98
Salaries, Bureau of Statistics, 1907	10,694.27	16,679.89	16,548.92	18,919.75	62,842.83
Collecting statistics relating to commerce, 1906	155.93				155.93
Collecting statistics relating to commerce, 1907	573.61	889.30	875.00	997.50	3,335.41
Total					72,800.15
BUREAU OF NAVIGATION.					
Salaries, Bureau of Navigation, 1906	2,400.86				2,400.86
Salaries, Bureau of Navigation, 1907	4,498.31	7,367.26	7,125.00	8,115.00	27,105.57
Contingent expenses, shipping service, 1906	1,152,96	170.35			1,323.31
Contingent expenses, shipping service, 1907	239.57	1,149.71	1,472.24	1,041.57	3,903.09
Rent of quarters for shipping commissioner, San Francisco, Cal., 1906	125.00				125.00
Rent of quarters for shipping commissioner, San Francisco, Cal., 1907	125.00	500.00	375.00	375.00	1,375.00
Total					36,232.83
BUREAU OF STANDARDS.					
Salaries, Bureau of Standards, 1906	8,192.51				8,192.51
Salaries, Bureau of Standards, 1907	18,017.96	26,788.86	26,590.13	32,153.62	103,550.57
Equipment, Bureau of Standards, 1906	8,991.57	141.40			9,132.97
Equipment, Bureau of Standards, 1907	3,850.69	13,564.42	8,168.30	7,722.39	33,305.80
General expenses, Bureau of Standards, 1906	947.43	225.92			1,173.35
General expenses, Bureau of Standards, 1907	996.77	4,845.47	4,502.49	3,077.09	13,421.82
Improvement and care of grounds, Bureau of Standards, 1907	1,272.57	1,265.84	65.05	396.54	3,000.00
Improvement and care of grounds, Bureau of Standards, 1907-8				507.37	507.37
Outbuilding, Bureau of Standards	131.69				131.69
Total					172,416.08
STEAMBOAT-INSPECTION SERVICE.					
Salaries, office of Supervising Inspector-General, Steamboat-Inspection Service, 1906	995.02				995.02
Salaries, office of Supervising Inspector-General, Steamboat-Inspection Service, 1907	2,156.64	3,235.00	3,235.00	3,765.00	12,391.64
Salaries, Steamboat-Inspection Service	92,789.50	97,765.83	97,790.83	98,569.39	386,915.55
Contingent expenses, Steamboat-Inspection Service	21,930.83	17,316.82	15,794.96	29,591.11	84,633.72
Total					484,935.93

Bureaus and titles of appropriations.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Totals.
BUREAU OF IMMIGRATION AND NATURALIZATION.					
Salaries, Bureau of Immigration, 1906	$2,579.23				$2,579.23
Salaries, Bureau of Immigration and Naturalization, 1907	5,229.94	$8,137.50	$8,132.02	$9,395.00	30,894.46
Enforcement of the Chinese-Exclusion Act, 1906	32,087.69	1,193.06	88.00		33,368.75
Enforcement of the Chinese-Exclusion Act, 1907	57,639.14	87,671.42	89,972.84	97,658.30	332,941.70
Naturalization of aliens, 1907	934.19	5,469.91	6,904.34	13,936.22	27,244.66
Immigrant station, Ellis Island, N. Y			12.00	60,656.97	60,668.97
Immigrant station, San Francisco, Cal	69.91	1,533.10	28.92		1,631.93
New island near Ellis Island, N. Y.	21,973.15				21,973.15
Expenses of regulating immigration	385,112.26	388,213.29	456,946.09	493,257.53	1,723,529.17
Payment to William John Wright and others	2,000.00				2,000.00
Payment to Cunard Steamship Co. (Limited)	555.69				555.69
Refund to Mexican American Steamship Co		100.00			100.00
Refund to McKay Steamship Line			40.00		40.00
Refund to Oscar Klocker			30.00		30.00
Total					2,237,557.71
BUREAU OF FISHERIES.					
Salaries, Bureau of Fisheries, 1906	491.60				491.60
Salaries, Bureau of Fisheries, 1907	43,731.98	67,618.52	67,984.55	71,252.00	250,587.05
Miscellaneous expenses, Bureau of Fisheries, 1906	30,946.92	10,659.09			41,606.01
Miscellaneous expenses, Bureau of Fisheries, 1907	42,711.65	87,190.29	63,983.62	78,511.91	272,397.47
Protection of salmon fisheries of Alaska, 1906	441.95	66.25			508.20
Salaries, agents at salmon fisheries in Alaska, 1907	749.99	1,125.00	1,125.00	1,309.17	4,309.16
Fish hatcheries, Alaska	483.16	1.45	116.25	1,108.75	1,709.61
Fish hatchery, Baird, Cal		435.12	864.28	10.06	1,309.46
Fish hatchery, Battle Creek, Cal	2,407.25	3.30	29.90	3.30	2,443.75
Fish hatchery, Cold Springs, Ga		10.00			10.00
Fish hatchery, Craigs Brook, Me		5,040.00	2,790.00	1,070.00	8,900.00
Fish hatchery, Green Lake, Me		6.00			6.00
Fish hatchery, Iowa		888.76	186.03	256.03	1,330.82
Fish hatchery, Lake County, Colo.	339.86	17.00	21.10	94.60	472.56
Fish hatchery, Mammoth Spring, Ark	1,359.77	3,514.81	804.32	400.12	6,079.02
Fish hatchery, Montana	370.62	169.10	68.25	16.95	624.92
Fish hatchery, Neosho, Mo				1,225.00	1,225.00
Fish hatchery, Put-in-Bay, Ohio	17.33	37.87	97.61	3,857.20	4,010.01
Fish hatchery, South Dakota	167.23	174.50			341.73
Fish hatchery, Tupelo, Miss	58.40	48.33		200.00	306.73
Fish hatchery, West Virginia	79.56	581.56		82.05	743.17
Fish hatchery, Woods Hole, Mass	6,813.98	8.42	4.06	164.04	6,990.50
Fish hatchery, Wytheville, Va	167.00		29.00	8.40	204.40
Repairs to schooner Grampus	28.85	25.96	2.63	6.36	63.80
Steam launch for Boothbay Harbor, Me			4,850.00		4,850.00
Total					611,520.97
Totals	979,530.64	1,025,481.46	1,046,090.87	1,215,632.76	4,266,735.73

The following table shows the expenditures during the fiscal year ended June 30, 1907, on account of all appropriations under the control of the Department of Commerce and Labor, giving in detail the total amount disbursed by the various disbursing officers of the Department:

By the disbursing clerk, Department of Commerce and Labor, on account of salaries and expenses of the Office of the Secretary of Commerce and Labor, the bureaus of Corporations, Manufactures, Labor, Statistics, Navigation, Immigration and Naturalization, Standards, and Fisheries, the Light-House Board, the office of the Supervising Inspector-General, Steamboat-Inspection Service, expenses of regulating immigration, expenses of enforcing the Chinese-exclusion act, salaries and expenses Steamboat-Inspection Service at large, salaries and expenses of agents at seal fisheries in Alaska, and public works of the Immigration and Fisheries Services (shown in detail in the above table of disbursements)	$4,266,735.73
By the engineer and naval secretaries of the Light-House Board, engineers and inspectors detailed from the Army and Navy to duty in the Light-House Establishment, and all other officers who disbursed money for the Light-House Establishment	4,650,541.91
By the disbursing clerk, Bureau of the Census, on account of salaries and expenses of the Bureau of the Census	1,187,463.69
By the special disbursing agent, Coast and Geodetic Survey, on account of salaries and expenses of the Coast and Geodetic Survey	859,873.08
By the special disbursing agents of the Immigration Service	20,909.87
By the special agents of the Department investigating trade relations abroad, as special disbursing agents	31,271.79
By customs officers, on account of witnesses' fees in steamboat investigations	845.95
By special disbursing agent, Steamboat-Inspection Service	1,144.08
By special disbursing agent, Fisheries Service	655.37
By the Auditor for the State and other Departments on account of all the bureaus, offices, and services	260,076.26
Total disbursements during the fiscal year	11,279,517.73

Congress has acted upon the recommendation contained in the annual report of my predecessor for the fiscal year ended June 30, 1906, and upon the recommendation contained in the annual estimates for the fiscal year ended June 30, 1907, by authorizing the abolition of the special disbursing agency for the Bureau of Fisheries and the consolidation of the work of that office with that of the disbursing clerk of the Department. This arrangement has proved eminently satisfactory, as by having disbursements made by the disbursing clerk of the Department a closer administrative supervision of expenditures can be maintained by the head of the Department. Economy in clerical help has also resulted from this change.

DIVISION OF PRINTING.

The work of improving the publications of the Department and economizing on the printing bills has continued during the past year.

As the sphere of the Department broadens and the effectiveness with which the bureaus do their work increases, the publication branch grows in bulk of product and in importance. The reports of the Department are its voice and a measure of its usefulness, and their improvement in every way is its constant aim.

The Department was allotted $500,000 for printing and binding for the fiscal year ended June 30, 1907, of which amount $125,000 was for the Bureau of the Census. Of the $375,000 remaining for printing and binding for the other offices, bureaus, and services of the Department, $332,190.99 was expended, leaving a balance to be covered into the Treasury of $42,809.01. As compared with the amount expended for this service during the fiscal year 1906, namely, $426,082.81, the past year's expenditure represents a decrease in the total cost of the Department's printing of $93,891.82.

The success of the Department's efforts to secure greater economy in printing appears in the notable contrast between the growth in the bulk of the Department's printing during the year and the decrease in the amount expended for it, shown in the following tables:

STATEMENT SHOWING THE AMOUNT OF WORK ORDERED FROM THE PUBLIC PRINTER DURING THE FISCAL YEARS 1906 AND 1907, BY CLASSES.

Class.	1906	1907	Increase (+) or decrease (−).	Per cent of increase (+) or decrease (−).
	Quantity.	*Quantity.*	*Quantity.*	
Reports, documents, and pamphlets	1,841,676	2,740,821	+ 899,195	+ 48.82
Blank forms	9,401,243	10,688,353	+1,287,110	+ 13.69
Circulars and decisions	180,650	368,708	+ 188,058	+104.00
Letter heads	1,401,500	1,754,500	+ 353,000	+ 25.11
Blank books, etc	25,622	27,204	+ 1,582	+ 6.18
Miscellaneous binding	3,523	3,324	− 533	− 5.65

STATEMENT SHOWING THE COST OF PRINTING AND BINDING DURING THE FISCAL YEARS 1906 AND 1907, BY CLASSES.

Class.	1906	1907	Increase (+) or decrease (−).	Per cent of increase (+) or decrease (−).
Reports, documents, and pamphlets	[a] $350,728.15	$241,555.97	−$109,172.18	−31.13
Blank forms	52,666.50	65,511.56	+ 12,845.06	+24.39
Circulars and decisions	3,881.21	3,846.19	− 35.02	− .09
Stationery: Letter heads, etc	3,919.31	7,563.18	+ 3,643.87	+92.96
Blank books, etc	6,254.97	7,036.88	+ 781.91	+12.50
Miscellaneous binding	4,676.05	4,755.48	+ 79.43	+ 1.69
Miscellaneous	3,956.62	1,921.73	− 2,034.89	−51.43
Total	426,082.81	332,190.99	− 93,891.82	−22.04

[a] Of this amount $253,519.55 was paid from the Congressional allotment for reports and documents ordered printed by law.

On March 14, 1906, in accordance with the Executive order of January 20, 1906, an advisory committee on printing and publication for this Department was appointed, consisting of the Assistant Secretary of Commerce and Labor, the Chief Clerk of the Bureau of the Census, and the Chief of the Division of Printing. This committee has devoted considerable time and study to the various publications of the Department, and the saving made during the past year in the Department's printing bill is largely the result of its initiative. It has had a wholesome effect in deterring the bureaus from making requests for printing not known to be necessary for the proper conduct of the public business. Taken in connection with the careful editing and preparation of all manuscripts before they are sent to the printer, the work of the committee has lessened the cost of the Department's publications, which at the same time have increased in number and usefulness.

Not only has this committee effected a large saving in the amount expended for printing during the past fiscal year, but it has prevented much waste of labor in compiling material intended for publication by the rejection in some cases of the outlines which the bureaus are required to submit for all proposed publications before the actual work of compilation is begun.

COMMITTEE ON STATISTICAL REORGANIZATION.

Under the authority conferred upon me by section 4 of the organic law establishing the Department of Commerce and Labor, which provides in part that "the Secretary of Commerce and Labor is hereby given the power and authority to rearrange the statistical work of the bureaus and offices confided to said Department, and to consolidate any of the statistical bureaus and offices transferred to said Department," I appointed on September 20, 1907, a committee consisting of Lawrence O. Murray, Assistant Secretary of Commerce and Labor, chairman; S. N. D. North, Director of the Census; Herbert Knox Smith, Commissioner of Corporations; Charles P. Neill, Commissioner of Labor, and O. P. Austin, Chief of the Bureau of Statistics, to inquire into and report to me upon the statistical work of this Department with a view to its reorganization and the consolidation of any of the branches engaged in the work. In order that the committee might have the advice of some distinguished economists and statisticians on the subject I invited Professors J. W. Jenks, of Cornell University, Ithaca, N. Y.; E. R. A. Seligman, of Columbia University, New York, N. Y.; and H. Parker Willis, of George Washington University, Washington, D. C., to serve in an advisory capacity to it. This committee has devoted much time to the subject, and has made a careful study of the work of the various

offices and bureaus of the Department engaged in gathering, compiling, and publishing statistical data, and of the publications emanating from each of them. The committee is now engaged in formulating its report, which will shortly be forwarded to me for my information and guidance in my efforts to coordinate the statistical work of this Department.

BUILDING FOR THE DEPARTMENT.

I earnestly recommend that Congress provide a suitable public building for this Department, large enough to permit of the concentration under one roof of all its scattered bureaus, with the exception of the Bureau of Standards, which is already occupying buildings specially designed to meet its needs. Such action as was contemplated by a provision in the sundry civil bill of the first session of the Fifty-ninth Congress (H. R. 19844) would be thoroughly acceptable. The locations of quarters that are now rented by this Department, and the amounts paid in rentals, are shown in the following table:

Location.	Occupied by—	Annual rental.
Willard Building, 513 515 Fourteenth street NW..	Department (main building).....	$11,880.00
Emery Building, northwest corner First and B streets NW.	Bureau of the Census.....	21,000.00
204-206 Fourteenth street NW.....	Bureau of the Census(storage purposes).	1,080.00
National Safe Deposit Building, corner New York avenue and Fifteenth street NW. (in part).	Bureau of Labor.....	6,750.00
Do	Bureau of Labor (rooms for storage) ...	750.00
Builders' Exchange Building, 719-721 Thirteenth street NW. (in part).	Light-House Board, Steamboat Inspection Service, and Bureau of Navigation.	7,600.00
Adams Building, 1333-1335 F street NW. (in part).	Bureau of Statistics.....	4,039.80
1137-1139 Seventeenth street NW.....	Department (stables).....	1,500.00
Basement, 920-922 E street NW.....	Light-House Board and Bureau of Statistics (storage of records and documents).	1,500.00
Munsey Building, rooms 404-408.....	Division of Naturalization.....	4,000.00
Total.....	.....	60,049.80

During the past year the crowded condition of the buildings of the Department, mentioned in the last annual report of the Secretary, has resulted in much discomfort to officials and employees, and necessitated makeshift arrangements that have materially decreased the efficiency of some portions of the Department's activities, as well as increased the running expenses.

Every effort has been made during the past two years to render the present quarters suitable to meet steadily growing needs, and during the past year it was found necessary to move the Division of Supplies into temporary quarters in the building occupied by the Bureau

of the Census, which are unsuited for continuous occupation by employees. In spite of this radical action, the extra space thus gained in the Willard Building has been entirely insufficient to provide room for the recently created Division of Information in the Bureau of Immigration and Naturalization, and for additional employees in the Bureau of Corporations and in the Bureau of Immigration and Naturalization. As a result furniture and employees have been forced out into the narrow hallways, to the detriment of administration and the partial obstructing of hallways which, when clear, are none too wide.

It has been impossible to give the Bureau of Corporations enough space to accommodate the number of employees already authorized, and every division of the Secretary's Office is crowded to such an extent that work is performed under serious handicap. In the endeavor to provide space I may mention that the Department library has been sacrificed; all books that could possibly be spared have been eliminated from the library of the Bureau of Labor; files and records not needed for current use have been put into storage; all records and papers of no further use or historic value have been destroyed by permission of Congress; cumbersome furniture has been replaced by the most compact; swinging typewriter brackets have been substituted for typewriter tables; and hallways have been utilized for file cases, for desks, and for clerks and messengers, until in some cases mere passageways exist through the hallways, which are otherwise treated as though they were separate rooms.

The building on Thirteenth street occupied by the Light-House Board, the Bureau of Navigation, and the Steamboat-Inspection Service, besides being very crowded, is old and unsuited to the requirements of the bureaus, and valuable records are exposed to destruction by fire.

Not including the Bureau of Standards, which is located in the suburbs, the buildings occupied by the Department are scattered over an area about 1½ miles long east and west and about one-half mile wide from north to south. The loss of time to officials and employees and the inconvenience and extra expense incident to the transaction of the daily business by so scattered an organization are self-evident.

My predecessor estimated that the assembling of the bureaus and offices of the Department in one public building would result in an annual saving in rent of $60,000, and also in a saving in administration of at least $66,000 a year, or a total of over $125,000 a year. This amount would pay the interest, at 2 per cent, on $6,250,000 of United States bonds. The saving in administration would result from a reduction in clerical force, made possible by consolidation

of the libraries and the disbursing and appointment work of outlying bureaus and offices; from a reduction in the subclerical force, including watchmen, engineers, charwomen, laborers, elevator conductors, mechanics, and the like, and through economy of time and service, and a saving in fuel, electric lights and power, horses, wagons, and telephones.

The increased values in the business section of Washington render it impossible to hire modern buildings at the rates now paid by the Department, and even partial concentration is rendered impossible without an extra appropriation.

Preparation for the taking of the Thirteenth Census must begin during the coming fiscal year, which renders it imperative that the Bureau of Manufactures and the Division of Supplies of the Secretary's Office, which are now housed in the Census building, should be moved to other quarters. There is scarcely a foot of space available in any of the Department buildings, whether owned by the Government or rented, and it is therefore necessary that an appropriation be made to furnish quarters for these two branches of the Department. The appropriation must also be adequate to furnish quarters for the overflow from the other buildings that will be made necessary by the steady increase in all branches of the Department's activities. I have therefore embodied in the estimates of the Department a request for the appropriation of $15,000, to be used to the best advantage in securing absolutely necessary quarters for the bureaus of this Department which are now either wholly or partially without adequate working space. Several years must necessarily elapse before a public building could be ready for occupancy by this Department, even though the acquisition of ground and the drawing of plans be authorized at the coming session of Congress. In the meantime it is of course necessary that the Department occupy such rented quarters as are available.

The Department has received several offers from private parties to erect a modern fireproof building of the commercial type, large enough to permit of the concentration of all of the renting bureaus, except the Bureau of the Census, provided the Department were authorized to enter into lease for such a building for a term of years, but no offer has been received without such a stipulation. It is believed that the economies and increased efficiency resulting from the concentration of the various branches of the Department would more than offset the increased rental that such an arrangement would entail.

CONCLUSION.

In conclusion, I desire to record my high appreciation of the faithful and efficient services of the officials and employees of the Department, and of their conscientious devotion to the duties assigned to

them. The Department probably contains more different branches of work than are comprised in any other Department of the Government. As stated in the beginning of this report, the difficulties arising from the diversity of work under the immediate supervision of the chiefs of the respective bureaus have been largely overcome by the periodical meetings in my office of the several chiefs, for the purpose of better coordinating the work of the Department as a whole.

OSCAR S. STRAUS,
Secretary.

REPORTS

OF THE

DEPARTMENT OF COMMERCE AND LABOR

BUREAU OF IMMIGRATION AND NATURALIZATION
BUREAU OF CORPORATIONS
BUREAU OF LABOR
BUREAU OF STATISTICS
BUREAU OF MANUFACTURES
BUREAU OF THE CENSUS
BUREAU OF NAVIGATION
STEAMBOAT-INSPECTION SERVICE
LIGHT-HOUSE BOARD
BUREAU OF FISHERIES
COAST AND GEODETIC SURVEY
BUREAU OF STANDARDS

REPORT

OF THE

COMMISSIONER-GENERAL OF IMMIGRATION

REPORT

OF THE

COMMISSIONER-GENERAL OF IMMIGRATION.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF IMMIGRATION AND NATURALIZATION,
Washington, July 1, 1907.

SIR: Viewing in the retrospect the fiscal year just closed, the Bureau confesses pride and satisfaction. Results have been attained; difficulties have been overcome; advancing strides have been taken; the functions and responsibilities of the Bureau have been enormously increased—yet every demand upon its resources and strength has been met promptly and vigorously. In fact, the fiscal year 1907 must always stand forth conspicuously in the history of this branch of the Government service. The very change of name with which it entered upon the year (resulting from the creation within it of a new division) was a significant presage of the expansion awaiting the Bureau. New legislation has added almost incalculably to its duties, necessitating the preparation of carefully planned regulations. Beginning with the next year still another division, extensive in design and pregnant with possibilities for the future, is to be organized. And all the while has there come the stream of aliens, the wards of the Bureau, constituting the chief object of its solicitude and imposing upon it duties infinite in detail, a description of only a very small portion of which can be crowded into the necessarily confined limits of a report.

An army of 1,285,349 souls, they have come, drawn hither by the free institutions and the marvelous prosperity of our country—the chance here afforded every honest toiler to gain a livelihood by the sweat of his brow or the exercise of his intelligence—surpassing in numbers the record of all preceding years. In the light of the past, who can prophesy the future? The world can but view with wonder and an awakening concern the facility with which we have absorbed the surplus millions of Europe, are now beginning to draw upon the reserve stock of some of its countries, and are even attempting to merge into our population some of the countless hordes of Asia.

In an attempt to furnish some idea of the character and extent of the Bureau's work during the past year, and following, for the sake of convenience of comparison, the system of arrangement adopted in the last report, the first subject for presentation is

I. IMMIGRATION.

The passage of the new immigration law, approved February 20, 1907, is the most noteworthy event of the year. Different features thereof will be alluded to in the appropriate subtitles of this title of

the report. It contains many provisions that will prove of great value in handling the problems confronting the executive officers. A number of the changes made are along lines suggested in the previous reports of the Bureau; and, as all such suggestions have been the outgrowth of practical experience, the result of their adoption is anticipated confidently and hopefully. A provision of the new act that was especially gratifying to the Bureau is section 39, which became effective on its passage, providing for the appointment of a special commission to investigate the entire subject of immigration. The commission has been constituted of men eminently qualified to gather information concerning this important matter, and from the manner in which they have embarked upon the performance of their duties the Bureau is satisfied that the country will be much enlightened by the report that will eventually be submitted. It is particularly pleasing that the efforts of a part of this commission will be directed to a consideration of conditions existing in the United States. The Bureau has been and will continue to be glad to assist the commission in every way possible by furnishing such data as its files contain (considerable in quantity and reliable in quality) and by seeing that a free hand and a clear road are given such of its members as undertake the investigation of the various immigration stations.

The statistical tables, with a few exceptions hereinafter noted, correspond with those bearing similar numerical designations in the report for 1906. Before taking up a discussion of the showing of each table, it is interesting to note the following salient features: The immigration for the year 1907 (1,285,349) exceeded that for 1906 (1,100,735) by 184,614, and that for the year 1905 (1,026,499) by 258,850, or an increase over the year 1906 of more than 17 per cent and over the year 1905 of more than 25 per cent. During the fiscal year 1906, 12,432 aliens were rejected at our ports; during the past year, 13,064, an increase of 632; hence the total number of those who have sought admission in 1907, viz, 1,298,413, exceeds the number who applied in 1906, viz, 1,113,167, by 185,246.

1. Statistical Tables.

In Table I a comparison, by ports of entry, is furnished between the number of aliens admitted during 1907 and during the preceding year, segregated by sex. The chief interest of these figures is found in the bearing that they have upon the distribution or settlement of the aliens within our territory, a subject which is discussed more in detail under subtitle 4 (p. 139). While the number landing at the large ports of New York, Boston, Philadelphia, and Baltimore has perhaps comparatively little direct connection with the question of where the aliens will eventually settle—those being railroad as well as steamship centers and the number coming to those ports being due, to a considerable extent, to the fact that such ports are in the line of natural travel—yet it is true that any considerable decrease in the number landing there, if accompanied by a corresponding increase at the smaller ports, particularly of the South, may be taken as indicative of some improvement as to the localities in which the aliens are settling. Of particular significance in this respect is the increase at the port of Charleston, S. C., explained at another stage of this report (p. 140), as it is directly connected with the growing

desire of the Southern States to draw within their boundaries a number of the better classes of immigrants, it being considered by practically all of the leading men of that section that the future development and welfare of the South depend upon its ability to receive and absorb a reliable laboring and farming element. Striking increases are also shown at New Orleans, Galveston, and Honolulu; but none of these increases has been sufficient to effect a reduction at the larger ports—New York, Boston, Baltimore, and Philadelphia all showing a marked increase.

TABLE I.—IMMIGRANT ALIENS ADMITTED, FISCAL YEARS ENDED JUNE 30, 1906 AND 1907, BY PORTS.

Port.	1906			1907		
	Males.	Females.	Total.	Males.	Females.	Total.
New York, N. Y.	608,647	271,389	880,036	722,730	282,026	1,004,756
Boston, Mass.	37,943	24,286	62,229	45,261	24,903	70,164
Baltimore, Md.	39,843	14,221	54,064	50,501	16,409	66,910
Philadelphia, Pa.	14,117	9,069	23,186	20,403	10,098	30,501
San Francisco, Cal.	3,388	750	4,138	2,996	543	3,539
San Juan, P. R.	1,017	435	1,452	620	311	931
Bangor, Me.	10	.....	10	.....	.....	.....
Brunswick, Ga.	11	.....	11	12	1	13
Charleston, S. C.	.....	.....	.....	359	230	589
Fernandina, Fla.	3	.....	3	21	.....	21
Galveston, Tex.	4,611	1,590	6,201	7,317	2,525	9,842
Gulfport, Miss.	21	.....	21	29	1	30
Jacksonville Fla.	17	3	20	23	13	36
Key West, Fla.	3,688	1,631	5,319	2,509	971	3,480
Miami, Fla.	419	180	599	1,051	311	1,362
Mobile, Ala.	245	47	292	45	9	54
New Bedford, Mass.	1,233	761	1,994	1,657	1,026	2,683
New Orleans, La.	1,456	595	2,051	2,411	914	3,325
Norfolk, Va.	47	9	56	42	1	43
Pensacola, Fla.	56	.....	56	32	.....	32
Portland, Me.	496	318	814	944	504	1,448
Portland, Oreg.	.....	.....	.....	46	.....	46
Providence, R. I.	17	2	19	.....	.....	.....
San Diego, Cal.	.....	.....	.....	33	12	45
Savannah, Ga.	24	2	26	30	.....	30
Seattle, Wash.	1,627	289	1,916	3,759	612	4,371
Tampa, Fla.	.....	.....	.....	1,609	722	2,331
Honolulu, Hawaii	8,550	830	9,380	21,037	3,494	24,531
Alaska	65	8	73	53	2	55
Mexican border	2,317	455	2,772	4,756	458	5,214
Through Canada:						
Atlantic ports	34,595	9,402	17,233	12,954	5,717	18,671
Border stations			24,741	25,596	3,286	28,882
Pacific ports			2,023	1,140	274	1,414
Total	764,463	336,272	1,100,735	929,976	355,373	1,285,349

Table II is perhaps of greater interest to certain of the European countries than to the United States, for it furnishes a striking illustration of the fact that the time has arrived when, if people are dissatisfied with existing political, economic, and social conditions in one country, they will find the means by which to desert their former homes and locate where a fair chance is afforded them. Its chief interest to the people of the United States, as pointed out in the last report of the Bureau, consists in the question that must arise in the mind of any person examining the figures as to whether or not our ability as a race to absorb foreign elements is not on the verge, at least, of being overtaxed. The matter of race, however, is more accurately given in Table III, to which anyone interested in attempting to solve this problem should also refer.

TABLE II.—IMMIGRANT ALIENS ADMITTED, FISCAL YEARS ENDED JUNE 30, 1906 AND 1907, SHOWING INCREASE AND DECREASE FOR EACH COUNTRY.

Country of last permanent residence.	1906	1907	Increase (+) or decrease (−).
Austria-Hungary	265,138	338,452	+ 73,314
Belgium	5,099	6,396	+ 1,297
Bulgaria, Servia, and Montenegro	4,666	11,359	+ 6,693
Denmark	7,741	7,243	− 498
France, including Corsica	9,386	9,731	+ 345
German Empire	37,564	37,807	+ 243
Greece	19,489	36,580	+ 17,091
Italy, including Sicily and Sardinia	273,120	285,731	+ 12,611
Netherlands	4,946	6,637	+ 1,691
Norway	21,730	22,133	+ 403
Portugal, including Cape Verde and Azore islands	8,517	9,608	+ 1,091
Roumania	4,476	4,384	− 92
Russian Empire and Finland	215,665	258,943	+ 43,278
Spain, including Canary and Balearic islands	1,921	5,784	+ 3,863
Sweden	23,310	20,589	− 2,721
Switzerland	3,846	3,748	− 98
Turkey in Europe	9,510	20,767	+ 11,257
United Kingdom:			
England	49,491	56,637	+ 7,146
Ireland	34,995	34,530	− 465
Scotland	15,866	19,740	+ 3,874
Wales	1,841	2,660	+ 819
Other Europe	48	107	+ 59
Total Europe	1,018,365	1,199,566	+181,201
China	1,544	961	− 583
Japan	13,835	30,226	+ 16,391
India	216	898	+ 682
Turkey in Asia	6,354	8,053	+ 1,699
Other Asia	351	386	+ 35
Total Asia	22,300	40,524	+ 18,224
Africa	712	1,486	+ 774
Australia, Tasmania, and New Zealand	1,682	1,947	+ 265
Pacific islands, not specified	51	42	− 9
British North America	5,063	19,918	+ 14,855
British Honduras	80	35	− 45
Other Central America	1,060	935	− 125
Mexico	1,997	1,406	− 591
South America	2,757	2,779	+ 22
West Indies	13,656	16,689	+ 3,033
Other countries	33,012	22	− 32,990
Grand total	1,100,735	1,285,349	+184,614

Table III is so arranged as to furnish a variety of interesting details concerning the people who have landed in this country during the past year, a few of which are mentioned in the text, as they are deserving of particular emphasis.

While of the admitted aliens 1,100,771 ranged in age from 14 to 44 and 138,344 were less than 14 years of age, only 46,234 had reached or passed the prime age of 45. Of those admitted, 337,573 could neither read nor write, and 5,829 could read but not write, the corresponding figures for the year 1906 being 265,068 and 4,755, respectively, the figures being exclusive of aliens aged less than 14 years. By taking the total number of those over 14 years of age arriving during the year, 1,147,005, and comparing that number with 343,402, the total of those who could neither read nor write and those who could read but not write, it is found that about 30 per cent were illiterate—an increase of 2 per cent over the percentage shown in 1906, viz, 28 per cent, which was an increase of 2 per cent over that of the preceding year.

The financial situation of admitted aliens is always an interesting subject. Of those admitted, 873,923 had less than $50 each in their

possession, while 107,502 were able to show amounts in excess of said sum. The total amount of money brought into the country by arriving aliens was $25,599,893, or an average of almost $20 per person. Further interesting details along the lines suggested in this part of last year's report can readily be calculated by reference to the table.

During the year there were turned back from our ports 13,064 aliens. The following comparative statement as to causes of rejection is inserted for the sake of convenience, carrying out the similar illustration on page 7 of the last report.

Cause of rejection.	1904	1905	1906	1907	Cause of rejection.	1904	1905	1906	1907
Idiocy	16	38	92	29	Conviction of crime	35	39	205	341
Insanity	33	92	139	189	Imported for prostitution	9	24	30	18
Pauperism	4,798	7,898	7,069	6,866	Contract laborers	1,501	1,164	2,314	1,434
Contagious diseases	1,560	2,198	2,273	3,822					

Under subtitle 3 of this report (p. 136) the subject of contagious diseases, insanity, idiocy, etc., is discussed in detail. An interesting fact shown by the above comparisons is that the number of contract laborers apprehended and turned back during the past year is 38 per cent less than the number so debarred in 1906.

An interesting feature of Table III is the column showing, by races, the number of aliens who have been afforded aid in hospitals of this country—a total of 11,528, of whom 2,202 were Hebrew, 2,808 Italian, 1,365 Polish, and 1,197 German, the balance being divided among the other races in numbers ranging from 357 down to 1.

The three columns under the heading "Returned" in Table III show that in the cases of 995 aliens warrants of deportation have been executed, after granting a hearing in which to show cause, if any, why expulsion should not be effected. This has been accomplished solely by administrative officers, without any cause for complaint, and at a relatively small cost to the Government. Detailed figures concerning the races to which aliens ordered deported belonged and the specific causes leading to the order for their expulsion are shown by Table III A. That table embodies all cases determined by the Department during the fiscal year; consequently its figures do not correspond with those classed as "Returned" in Table III. The difference is due to escapes, deaths, and delays in effecting deportation, and to the fact that Mexicans and Canadians are not included in Table III.

TABLE III.—IMMIGRANT ALIENS ADMITTED, DEBARRED, RETURNED, AND RELIEVED IN HOSPITAL, FISCAL YEAR ENDED JUNE 30, 1907, BY RACES OR PEOPLES.

ADMITTED.

Race or people.	Sex.			Age.			Illiteracy, 14 years and over.		Money.			Have been in the United States before.
	Male.	Female.	Total.	Under 14 years.	14 to 44 years.	45 years and over.	Can read, but can not write.	Can neither read nor write.	Aliens bringing— $50 or over.	Aliens bringing— Less than $50.	Total amount of money shown.	
African (black)	3,332	1,903	5,235	500	4,510	225	20	750	649	3,184	$125,052	956
Armenian	1,874	770	2,644	371	2,174	99	2	544	215	1,557	66,270	118
Bohemian and Moravian	8,142	5,412	13,554	2,539	10,446	569	15	216	1,134	8,043	337,911	234
Bulgarian, Servian, and Montenegrin	26,423	751	27,174	296	26,358	520	38	11,998	539	25,494	427,088	437
Chinese	706	64	770	85	662	23	.....	51	367	251	60,784	26
Croatian and Slovenian	40,538	7,288	47,826	1,694	45,167	965	65	16,721	982	42,329	635,687	2,501
Cuban	3,747	1,728	5,475	790	4,305	380	6	561	1,359	1,394	162,445	2,339
Dalmatian, Bosnian, and Herzegovinian	7,061	332	7,393	109	7,075	209	6	3,612	353	6,449	141,696	149
Dutch and Flemish	8,362	4,105	12,467	2,560	9,249	658	17	400	2,430	5,184	443,359	619
East Indian	1,056	16	1,072	4	1,055	13	3	487	255	745	39,278	27
English	33,100	18,026	51,126	7,982	39,061	4,083	66	536	18,724	17,937	2,465,531	7,804
Finnish	10,326	4,534	14,860	967	13,559	334	78	351	801	11,788	270,417	987
French	5,425	3,967	9,392	1,002	7,844	546	5	170	3,911	3,058	606,465	1,530
German	56,170	36,766	92,936	14,845	73,379	4,712	172	5,310	16,882	44,809	3,356,684	5,225
Greek	44,647	1,636	46,283	819	45,169	295	19	13,883	2,365	38,945	967,972	1,041
Hebrew	80,530	68,652	149,182	37,696	103,779	7,707	438	31,885	7,213	56,594	1,966,091	1,759
Irish	21,871	16,835	38,706	2,243	35,316	1,147	51	713	4,701	26,219	880,933	2,950
Italian (north)	40,949	10,615	51,564	4,008	46,089	1,467	15	4,741	5,160	37,533	1,237,668	4,183
Italian (south)	190,905	51,592	242,497	24,890	207,339	10,268	88	115,803	7,864	185,926	3,197,245	16,195
Japanese	27,845	2,979	30,824	249	30,251	324	14	9,654	7,017	23,427	953,942	1,589
Korean	36	3	39	1	38	.....	.....	.....	11	25	1,179	4
Lithuanian	18,716	7,168	25,884	1,563	23,928	393	1,017	14,256	585	20,900	271,867	384
Magyar	44,804	15,267	60,071	4,384	54,064	1,623	60	5,779	1,475	48,468	1,012,686	2,995
Mexican	74	17	91	7	78	6	.....	3	47	18	5,164	53
Pacific Islander	2	1	3	.....	3	.....	.....	.....	1	1	75	.....
Polish	100,700	37,333	138,033	9,602	125,904	2,527	3,091	49,842	2,369	110,616	1,537,572	4,058
Portuguese	5,812	3,836	9,648	2,431	6,581	636	4	5,524	721	5,678	129,423	540
Roumanian	17,779	1,421	19,200	248	18,314	638	38	7,373	199	17,944	267,037	539
Russian	15,095	1,712	16,807	740	15,774	293	147	6,998	726	13,646	242,686	264
Ruthenian (Russniak)	18,451	5,630	24,081	731	22,952	398	114	12,930	209	21,460	274,282	1,366
Scandinavian	34,164	19,261	53,425	4,840	46,606	1,979	63	475	4,955	38,171	1,120,208	4,026
Scotch	13,666	6,850	20,516	3,242	16,060	1,214	18	149	6,495	7,369	895,936	2,398
Slovak	28,951	13,090	42,041	3,766	37,319	956	101	8,130	751	35,057	580,850	4,219
Spanish	7,268	2,227	9,495	1,596	7,491	408	31	2,617	2,465	5,606	352,511	1,214

.....	734	326	1,060	159	803	98	1	16	658	80	92,053	3 4
Syrian.....	4,276	1,604	5,880	664	5,044	172	14	2,870	1,259	3,131	182,634	447
Turkish.....	1,855	47	1,902	18	1,803	21	1	1,262	108	1,723	39,362	71
Welsh.....	1,852	902	2,754	466	2,114	174	6	18	854	1,059	124,997	281
West Indian (except Cuban).....	778	603	1,381	179	1,083	119	4	16	520	423	54,922	361
All other peoples.....	1,954	104	2,058	58	1,965	35	1	929	173	1,679	71,931	49
Total.....	929,976	355,373	1,285,349	138,344	1,100,771	46,234	5,829	337,573	107,502	873,923	25,599,893	74,282

TABLE III.—IMMIGRANT ALIENS ADMITTED, DEBARRED, RETURNED, AND RELIEVED IN HOSPITAL, FISCAL YEAR ENDED JUNE 30, 1907, BY RACES OR PEOPLES—Continued.

DEBARRED, RETURNED, AND RELIEVED IN HOSPITAL.

Race or people.	Debarred.													Returned.			Relieved in hospital.
	Idiots.	Insane persons.[a]	Paupers or likely to become public charges.[b]	Loathsome or dangerous contagious diseases.	Convicts.	Polygamists.	Without passport.	Prostitutes.	Persons who procure or attempt to bring in prostitutes.	Accompanying aliens.	Contract laborers.	Under Chinese-exclusion act.	Total debarred.	Within 1 year for causes arising subsequent to landing.	Within 3 years, because here in violation of law.	Total returned.	
African (black)		1	35	16				2		2	9		65	1	4	5	10
Armenian			33	50						1	1		85				86
Bohemian and Moravian		2	29	14	1					1	2		49		8	8	129
Bulgarian, Servian, and Montenegrin	1	1	176	64	4						344		590		8	8	137
Chinese			13	95								160	268				
Croatian and Slovenian	1	3	207	110	21	1				2	2		347		21	21	216
Cuban	1	1	16	11	2			1		1	4		37		1	1	15
Dalmatian, Bosnian, and Herzegovinian		1	22	8	2						17		50	1	7	8	30
Dutch and Flemish		4	42	8				1			12		67		10	10	59
East Indian			286	102							29		417				1
English		26	480	58	2			1			130		697	8	61	69	138
Finnish		2	48	35						4			89		23	23	60
French		2	66	16				8			18		110	1	32	33	53
German	3	18	380	181	16			1		12	33		644	4	119	123	1,197
Greek		1	393	107	5					15	63		584		21	21	357
Hebrew	9	17	808	362	3			1		29	28		1,257	16	96	112	2,202
Irish	1	44	117	15	2					3	14		196	1	63	64	186
Italian (north)		5	147	60	11			1		4	42		270	2	9	11	216
Italian (south)	7	23	1,561	473	163			1		31	143		2,402	11	107	118	2,592
Japanese			320	709	1		51	1	1		156		1,239		65	65	1
Korean			2	1			9						12				
Lithuanian		3	78	94							2		177		6	6	306
Magyar	1	2	144	63	20					2	9		241	4	45	49	503
Mexican			1	1									2		15	15	
Polish	1	8	421	263	43					9	82		827	8	73	81	1,365
Portuguese		1	47	6						1	2		57		4	4	47
Roumanian		1	69	44	4						28		146	1	5	6	86
Russian			41	36							37		114	1	13	14	115
Ruthenian (Russniak)		3	116	49	24					1	26		219		7	7	260
Scandinavian		10	99	41						1	20		171	5	39	44	184

Scotch	2	7	169	7						4	33		222	1	12	13	44
Slovak	1	2	130	62	15					1	7		218	1	5	6	518
Spanish			36	39							47		122	4	4	8	53
Spanish-American			10	18							5		23		2	2	
Syrian		1	269	557	1	9				10	51		898		22	22	203
Turkish			11	10							1		22		2	2	52
Welsh			17	4							13		34		4	4	28
West Indian (except Cuban)	1		3	6									10		2	2	21
All other peoples			24	27	1						24		76		10	10	58
Total	29	189	6,866	3,822	341	10	60	18	1	134	1,434	160	13,064	70	925	995	11,528

[a] Includes those who have been insane within five years, those who have had two attacks of insanity, and epileptics.
[b] Includes professional beggars.

TABLE III A.—ALIENS WITHIN THE UNITED STATES

Race or people.	Deportation of aliens in these										
	Anarchists prior to admission.	Contract laborers and aliens admitted within 1 year subsequent to their deportation as such.	Convicts prior to admission.	Epileptics prior to admission.	Idiots prior to admission.	Insane at the time of admission.	Insane within five years prior to admission.	Insanity; two attacks prior to admission.	Afflicted with a loathsome or a dangerous contagious disease at the time of admission.	Prostitutes prior to admission and women imported for purposes of prostitution.	Procurers of, or persons attempting to bring in, prostitutes or women for purposes of prostitution.
African (black)	0	0	0	0	0	0	0	0	0	0	0
Armenian	0	0	0	0	0	0	0	0	0	0	0
Bohemian and Moravian	0	0	0	0	0	0	0	0	0	0	0
Bulgarian, Servian, and Montenegrin	0	0	0	0	0	0	0	0	0	0	0
Chinese	0	0	0	0	0	0	0	0	0	0	0
Croatian and Slovenian	0	0	0	0	0	0	0	0	0	0	0
Cuban	0	0	0	0	0	0	0	0	0	2	0
Dalmatian, Bosnian, and Herzegovinian	0	0	0	0	0	0	0	0	0	0	0
Dutch and Flemish	0	4	0	0	0	0	0	0	0	0	0
East Indian	0	0	0	0	0	0	0	0	0	0	0
English	0	14	1	1	0	1	3	0	0	1	0
Finnish	0	0	0	0	0	0	0	0	0	0	0
French	0	2	0	0	0	0	0	0	0	6	3
German	0	1	2	1	0	0	0	0	0	2	1
Greek	0	1	0	0	0	0	0	1	1	0	0
Hebrew	0	0	0	1	0	0	0	0	0	0	0
Irish	0	1	0	0	0	0	0	1	0	0	0
Italian (north)	0	10	0	0	0	0	0	0	0	0	0
Italian (south)	0	0	7	0	0	0	0	0	0	2	1
Japanese	0	11	0	0	0	0	0	0	0	0	1
Korean	0	0	0	0	0	0	0	0	0	0	0
Lithuanian	0	0	0	0	0	0	0	0	0	0	0
Magyar	0	0	0	0	0	0	0	0	0	0	0
Mexican	0	7	0	0	0	0	0	0	0	5	0
Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Polish	0	0	1	1	0	0	0	0	0	0	0
Portuguese	0	0	0	0	0	0	0	0	0	0	0
Roumanian	0	0	0	0	0	0	0	0	0	0	0
Russian	0	0	0	0	0	0	0	0	0	0	0
Ruthenian (Russniak)	0	0	0	0	0	0	0	0	0	0	0
Scandinavian	0	0	0	1	0	0	1	0	0	2	0
Scotch	0	0	0	0	0	0	0	0	0	0	0
Slovak	0	0	0	0	0	0	0	0	0	0	0
Spanish	0	3	0	0	0	0	0	0	0	4	0
Spanish-American	0	0	0	0	0	0	0	0	0	0	0
Syrian	0	0	0	0	0	0	0	0	1	0	0
Turkish	0	0	0	0	0	0	0	0	0	0	0
Welsh	0	0	0	0	0	0	0	0	0	0	0
West Indian (except Cuban)	0	0	0	0	0	0	0	0	0	0	0
All other peoples	0	0	0	0	0	0	0	0	0	0	
Total	0	54	11	5	0	1	4	2	2	24	6

ORDERED DEPORTED, FISCAL YEAR ENDED JUNE 30, 1907.

classes is mandatory—Act of 1903.										Deportation only with alien's consent—Rule 17. (Public charges from causes arising subsequent to admission, showing mental or physical affliction.)				
Professional beggars and paupers prior to admission.	Polygamists prior to admission.	Entered surreptitiously or without due process of law.	Public charges from causes existing prior to admission (showing mental or physical affliction, if any).						Total.					Total (by race).
			Insanity.	Other mental afflictions.	Loathsome or dangerous contagious disease.	Dependent members of family.	All others.	Total.		Insanity.	Loathsome or dangerous contagious disease.	All others.	Total.	
0	0	0	2	0	1	0	0	3	3	0	0	0	0	3
0	0	1	2	0	1	0	0	3	4	0	0	0	0	4
0	0	1	9	2	1	5	3	20	21	0	0	0	0	21
0	0	1	6	2	2	0	2	12	13	0	0	0	0	13
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	23	7	1	2	0	9	19	42	0	0	0	0	42
0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
0	0	1	1	0	0	0	0	1		0	0	0	0	2
0	0	3	0	1	0	0	3	4	11	0	0	0	0	11
0	0	1	0	0	0	0	0	0	1	0	0	0	0	1
0	0	9	19	1	2	5	30	57	87	0	1	0	1	88
0	0	0	16	2	1	3	4	26	26	0	0	0	0	26
0	0	4	11	0	2	3	2	18	33	0	0	0	0	33
0	0	12	43	6	9	7	21	86	105	0	0	1	1	106
0	0	8	4	0	1	0	2	7	18	0	0	0	0	18
0	0	7	64	2	17	14	22	119	127	0	1	7	8	135
0	0	9	35	4	4	2	11	56	67	0	0	0	0	67
0	0	4	11	0	2	0	0	13	27	0	0	0	0	27
0	0	14	30	2	23	3	29	87	111	0	1	2	3	114
0	0	170	1	0	0	0	0	1	183	0	0	0	0	183
0	0	3	0	0	0	0	0	0	3	0	0	0	0	3
0	0	1	7	0	1	0	0	8	9	0	0	0	0	9
0	0	0	14	0	4	1	9	28	28	0	0	1	1	29
0	0	68	2	0	0	5	0	7	87	0	0	0	0	87
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	10	17	3	4	1	24	49	61	0	1	1	2	63
0	0	1	2	0	0	0	0	2	3	0	0	0	0	3
0	0	0	2	0	0	0	0	2	2	0	1	0	1	3
0	0	9	5	1	1	2	2	11	20	0	0	0	0	20
0	0	0	5	1	0	0	2	8	8	1	0	0	1	9
0	0	0	32	1	6	4	8	51	55	0	0	0	0	55
0	0	2	2	0	0	0	2	4	6	0	0	0	0	6
0	0	0	7	0	0	0	4	11	11	0	0	0	0	11
0	0	10	1	0	0	0	0	1	18	0	0	0	0	18
0	0	6	1	0	0	0	1	2	8	0	0	0	0	8
0	0	45	0	0	0	0	0	0	46	0	0	0	0	46
0	0	1	0	1	0	0	0	1	2	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	0	2	0	0	0	0	2
0	0	0	2	0	0	0	0	2	2	0	0	0	0	2
0	0	426	360	30	84	55	190	719	1,254	1	5	12	18	1,272

Table III B is a repetition of the statement of rejections since 1891, which was first published in the report for 1904 and which was inserted on page 14 of last year's report. The figures for the year just passed have been added thereto.

TABLE III B.—ALIENS REFUSED ADMISSION AT SEAPORTS AND THOSE RETURNED AFTER LANDING, FISCAL YEARS ENDED JUNE 30, 1892–1907.

Year.	Immigrants.	Debarred.															Returned in 1 year after landing.	Returned in 3 years after landing.
		Idiots.	Insane persons.	Paupers, or likely to become public charges.	Loathsome or dangerous contagious diseases.	Convicts.	Polygamists.	Anarchists.	Prostitutes.	Persons who procure or attempt to bring in prostitutes.	Assisted immigrants.	Accompanying aliens.	Contract laborers.	Without passport.	Under provisions of Chinese-exclusion act.	Total debarred.		
1892	579,663	4	17	1,002	80	26	...	...	80	.....	23	....	932	...	.....	2,164	637	....
1893	439,730	3	8	431	81	12	...	...	...	.....	....	....	518	...	.....	1,053	577	....
1894	285,631	4	5	802	15	8	...	...	2	.....	....	....	553	...	.....	1,389	417	....
1895	258,536	6	....	1,714	.....	4	...	...	...	.....	1	....	694	...	.....	2,419	177	....
1896	343,267	1	10	2,010	2	...	...	...	...	.....	....	....	776	...	.....	2,799	238	....
1897	230,832	1	6	1,277	1	1	...	...	...	.....	3	....	328	...	.....	1,617	263	....
1898	229,299	1	12	2,261	258	2	...	...	...	.....	79	....	417	...	.....	3,030	199	....
1899	311,715	1	19	2,599	348	8	...	...	...	.....	82	....	741	...	.....	3,798	263	....
1900	448,572	1	32	2,974	393	4	...	...	7	.....	2	....	833	...	.....	4,246	356	....
1901	487,918	6	16	2,798	309	7	...	...	3	.....	50	....	327	...	.....	3,516	363	....
1902	648,743	7	27	3,944	709	9	...	...	3	.....	....	....	275	...	.....	4,974	465	....
1903	857,046	1	23	5,812	1,773	51	1	...	13	.....	9	....	1,086	...	.....	8,769	547	....
1904	812,870	16	33	4,798	1,560	35	...	1	9	3	38	....	1,501	...	.....	7,994	300	479
1905	1,026,499	38	92	7,898	2,198	39	3	1	24	4	19	....	1,164	...	394	11,879	98	747
1906	1,100,735	92	139	7,069	2,273	205	5	1	30	2	....	180	2,314	...	122	12,432	61	615
1907	1,285,349	29	189	6,866	3,822	341	10	...	18	1	....	134	1,434	60	160	13,064	70	925

Table III C is designed to show by ports and causes the number of citizens of Canada and Mexico refused admission during the year—a total of 1,863. The point of chief interest is the remarkable contrast between the figures for the two countries, it having been necessary to turn back on the Canadian border only 415 Canadians, while on the Mexican border 1,347 Mexicans were refused admission. The remaining 101 shown by the table are miscellaneous cases arising at several of the seaports. The contrast prevails throughout the list of causes, 770 paupers having been rejected on the Mexican as against 250 on the Canadian border, and 132 diseased, 367 contract laborers, and 50 prostitutes on the former as against 9, 113, and 24, respectively, on the latter.

TABLE III C.—CITIZENS OF FOREIGN CONTIGUOUS COUNTRIES REFUSED ADMISSION FISCAL YEAR ENDED JUNE 30, 1907.

Station.	Idiots.	Insane persons.[a]	Paupers, or likely to become public charges.[b]	Loathsome or dangerous contagious diseases.	Convicts.	Polygamists.	Anarchists.	Prostitutes.	Persons who procure or attempt to bring in prostitutes.	Accompanying aliens.	Contract laborers.	Total debarred.
CANADIAN BORDER STATIONS.												
Black Rock, N. Y.	1	1	8		1						6	17
Blaine, Wash.								1				1
Calais, Me.			3									3
Detroit, Mich.	1	1	43	4	3			7		1	15	75
Duluth, Minn.			3									3
Halifax, Nova Scotia			6								1	7
Ketchikan, Alaska								1				1
Montreal, Canada			55	1							10	66
Newport, Vt.			28							1		29
Niagara Falls, N. Y.			35	2				5			15	57
Northport, Wash.				2			1	2				5
Portal, N. Dak.			1								6	7
Port Huron, Mich.	1		21		1			3	1		11	38
St. Clair, Mich.											1	1
St. Johns, New Brunswick			20					1			7	28
Sault Ste. Marie, Mich.			1					4			20	25
Sumas, Wash.			4								1	5
Sweet Grass, Mont.		1									7	8
Winnipeg, Manitoba			15								3	18
Yarmouth, Nova Scotia		4	7								10	21
Total	3	7	250	9	5		1	24	1	2	113	415
MEXICAN BORDER STATIONS.												
Brownsville, Tex.	1	2	64	21		2		31	1		77	199
Eagle Pass, Tex.	1		60	9				4		5	25	104
El Paso, Tex.		1	72	53				11		6	6	149
Laredo, Tex.	2	2	514	41				3		2	226	790
Douglas, Ariz.		1										1
Naco, Ariz.											13	13
Nogales, Ariz.			3									3
San Antonio, Tex.		1	57	8				1		1	20	88
Total	4	7	770	132		2		50	1	14	367	1,347
SEAPORT STATIONS.												
New York, N. Y.			1									1
San Diego, Cal.				2				2				4
San Francisco, Cal.			1	31						1	63	96
Total			2	33				2		1	63	101
Grand total	7	14	1,022	174	5	2	1	76	2	17	543	1,863

[a] Includes those who have been insane within five years, those who have had two attacks of insanity, and epileptics.
[b] Includes professional beggars.

Table IV furnishes a convenient means of comparing the number of aliens, male and female, admitted during each month of the fiscal year 1907, with the number for each month of the preceding year. Comparisons with previous years can readily be made by referring to former reports.

TABLE IV.—IMMIGRANT ALIENS ADMITTED, FISCAL YEARS ENDED JUNE 30, 1906 AND 1907, BY MONTHS.

Month.	1906			1907		
	Males.	Females.	Total.	Males.	Females.	Total.
July	49,227	26,863	76,090	53,892	30,511	84,403
August	38,896	24,513	63,409	52,580	29,012	81,592
September	45,265	32,284	77,549	60,600	34,741	95,341
October	52,409	34,349	86,758	66,029	33,945	99,974
November	38,787	22,587	61,374	65,116	29,505	94,621
December	41,159	20,957	62,116	60,407	25,059	85,466
January	36,034	15,093	51,127	40,585	13,832	54,417
February	52,507	16,189	68,696	51,173	14,368	65,541
March	104,922	27,470	132,392	113,706	25,412	139,118
April	114,702	35,695	150,397	116,864	28,392	145,256
May	108,812	42,115	150,927	137,845	47,041	184,886
June	81,743	38,157	119,900	111,179	43,555	154,734
Total	764,463	336,272	1,100,735	929,976	355,373	1,285,349

Tables inserted hereinafter are filled with items of interest, arranged conveniently for reference, and will doubtless be found as helpful to the seeker after information as the similar tables heretofore published.

TABLE V.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY COUNTRIES OF LAST PERMANENT RESIDENCE AND RACES OR PEOPLES.

Country of last permanent residence.	African (black).	Armenian.	Bohemian and Moravian (Czech).	Bulgarian, Servian, and Montenegrin.	Chinese.	Croatian and Slovenian.	Cuban.	Dalmatian, Bosnian, and Herzegovinian.	Dutch and Flemish.	East Indian.	English.	Finnish.	French.	German.	Greek.	Hebrew.	Irish.	Italian (north).	Italian (south).	Japanese.	Korean.
Austria-Hungary	1		13,363	6,223		47,125		7,263	13		10		15	40,497	5	18,885		1,486	20		
Belgium	4					1		5	5,216		8		860	126	2	83	5	21	5		
Bulgaria, Servia, and Montenegro		14		11,053		4		11						15	188	11					
Denmark									3		2	2	1	28		30					
France, including Corsica	11	41	8	3		8	7		142		160	2	7,084	337	253	306	40	511	346	4	
German Empire		4	90	9		111		1	59	2	27	2	57	32,276	25	734	4	172	37	5	
Greece		17	1	45		5		2			6		2	8	36,404	9	1	6	6		
Italy, including Sicily and Sardinia		7		2	1	6	1		2		24		39	82	16	11	2	47,814	237,680		
Netherlands	1					1			6,456		20	1	5	61	4	74	2				
Norway											2	64		13	1	3		1	1		
Portugal, including Cape Verde and Azore islands	349										3		2	1	3	24			4		
Roumania		7		101					3				2	266	35	3,605		2			
Russian Empire		341	31	12		1		1	7	2	8	14,311	10	13,480	46	114,932			5	1	
Spain, including Canary and Balearic islands	2						8		2		18		15	10	28	4		12	6		
Sweden					1						2	22		8		16		1			
Switzerland		4	2	1		5			15		4	1	410	2,996		62	1	193	8		
Turkey in Europe	1	74		9,412		31		2	3				1	11	7,060	588		3			
United Kingdom	19	81	12	5	1	19	4	3	203	40	43,098	66	271	841	109	7,032	37,660	288	339	49	
Other Europe	1							1			34			3	1				12		
Total Europe	389	590	13,507	26,866	3	47,317	20	7,289	12,124	44	43,426	14,471	8,774	91,059	44,240	146,409	37,715	50,510	238,469	59	
China				1	748				2	86	36		11	9	10	7	2	4	3	3	1
Japan	3			1	1					7	23			12	4	3	2		1	30,148	
India	1									833	38		3	4		2	3		1	1	
Turkey in Asia	1	1,666		87				2			3		4	2	1,353	330			3		
Other Asia		17		4					2	2	2		6	4	6	17	1		2	1	31
Total Asia	5	1,683		93	749			2	4	928	102		24	31	1,373	359	8	4	10	30,153	32

TABLE V.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY COUNTRIES OF LAST PERMANENT RESIDENCE AND RACES OR PEOPLES—Continued.

Country of last permanent residence.	African (black).	Armenian.	Bohemian and Moravian (Czech).	Bulgarian, Servian, and Montenegrin.	Chinese.	Croatian and Slovenian.	Cuban.	Dalmatian, Bosnian, and Herzegovinian.	Dutch and Flemish.	East Indian.	English.	Finnish.	French.	German.	Greek.	Hebrew.	Irish.	Italian (north).	Italian (south).	Japanese.	Korean.
Africa	15	254	.....	5	.....	8	.....	.....	8	2	209	2	19	56	126	317	29	91	61	2	....
Australia, Tasmania, and New Zealand	.....	.....	1	1	.....	14	.....	25	3	.....	1,210	10	13	76	38	2	187	30	14	3	....
Pacific islands, not specified	.....	.....	.....	.....	1	.....	.....	.....	10	1	5	1	15	3	.....	.....	.....	.....	.....	2	...
British North America	105	111	36	179	9	428	6	50	228	89	4,515	355	308	1,121	354	1,818	705	578	3,309	304	...
British Honduras	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	1	.....	6	.....	1	3	.....	...
Other Central America	89	.....	3	.....	.....	4	5	1	8	2	98	7	20	57	12	9	11	45	45	2	...
Mexico	12	1	5	6	4	17	9	7	2	.....	74	8	54	139	43	6	18	95	36	256	4
South America	48	3	2	24	.....	36	2	17	20	1	79	4	36	253	36	243	7	171	489	31	1
West Indies	4,561	1	.....	.....	3	2	5,433	2	59	5	1,396	2	128	137	61	12	26	39	61	12	....
Other countries	1	1	.....	.....	1	.....	.....	.....	1	.....	1	.....	1	3	.....	1	.....	.....	.....	.....	2
Grand total	5,235	2,644	13,554	27,174	770	47,826	5,475	7,393	12,467	1,072	51,126	14,860	9,392	92,936	46,283	149,182	38,706	51,564	242,497	30,824	39

TABLE V.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY COUNTRIES OF LAST PERMANENT RESIDENCE AND RACES OR PEOPLES—Continued.

Country of last permanent residence.	Lithuanian.	Magyar.	Mexican.	Pacific Islander.	Polish.	Portuguese.	Roumanian.	Russian.	Ruthenian (Russniak).	Scandinavian (Norwegians, Danes, and Swedes).	Scotch.	Slovak.	Spanish.	Spanish-American.	Syrian.	Turkish.	Welsh.	West Indian (other than Cuban).	Other peoples.	Grand total.
Austria-Hungary	8	59,593			59,719		18,429	195	23,751	1	3	41,815				18			14	338,452
Belgium	3	2			21			7		3	5	1			1	1	13		3	6,396
Bulgaria, Servia, and Montenegro					4		9			1		3				36			10	11,359
Denmark	1	1			9			2	1	7,163										7,243
France, including Corsica	3	10	8		20	5	17	69		43	11	1	92	49	55	33		8	44	9,731
German Empire	52	30			3,888	1	12	36	7	123	1	30	4	3		4			1	37,807
Greece		2						3							1	48			14	36,580
Italy, including Sicily and Sardinia	4	3	2		5	2		3		4	3		8	1	7	1	1			285,731
Netherlands	1	5			1			2		3										6,637
Norway								4		22,043		1								22,133
Portugal, including Cape Verde and Azore islands						9,212							6	4						9,608
Roumania	2	3			5		339			1		2				2			9	4,384
Russian Empire	24,811	3			73,122	1	7	16,085	150	1,416		10			10	65			75	258,943
Spain, including Canary and Balearic islands			3			37	2	2					5,452	15	3	1		3	161	5,784
Sweden					2					20,534		2							1	20,589
Switzerland		5			12		2	12		3			1	5			6			3,748
Turkey in Europe		2			2		194	3		1		5	6		952	1,124			1,292	20,767
United Kingdom	879	18	2	1	337	35	5	79	1	494	18,347		333	69	97	46	2,540	17	67	113,567
Other Europe										5	1		46		1			1	1	107
Total Europe	25,764	59,677	15	1	137,147	9,293	19,016	16,502	23,910	51,838	18,371	41,870	5,948	146	1,127	1,379	2,560	29	1,692	1,199,566
China					1		6	11		10	7		1				1	1		961
Japan					3			8		2	8									30,226
India						2	1				4					2			3	898
Turkey in Asia							1	1		1	1				4,153	383			62	8,053
Other Asia					6	1		51		2					56	4			171	386
Total Asia					10	3	8	71		15	20		1		4,209	389	1	1	236	40,524

TABLE V.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY COUNTRIES OF LAST PERMANENT RESIDENCE AND RACES OF PEOPLE—Continued.

Country of last permanent residence.	Lithuanian	Magyar.	Mexican.	Pacific Islander.	Polish.	Portuguese.	Roumanian.	Russian.	Ruthenian (Russniak).	Scandinavian (Norwegians, Danes, and Swedes).	Scotch.	Slovak.	Spanish.	Spanish-American.	Syrian.	Turkish.	Welsh.	West Indian (other than Cuban).	Other peoples.	Grand total.
Africa					2	11	1	6		27	87		17	7	47	21	6	1	49	1,486
Australia, Tasmania, and New Zealand		2		1	2	1	6	7		56	205	11	6	2	7	1	12		1	1,947
Pacific Islands, not specified				1						1	1		1							42
British North America	106	368	1		820	18	111	149	166	1,278	1,734	140	12	3	133	71	159	5	36	19,918
British Honduras											1							1	1	35
Other Central America		4	4		1	5		10		24	20		105	304	2			36	2	935
Mexico		5	31		5	9		7		38	22	4	322	17	101	26	14		9	1,406
South America	14	11	5		43	125	55	46	5	24	22	16	283	430	142	2		32	18	2,779
West Indies		1	35		3	182	3	6		122	33		2,800	151	111	13	2	1,276	11	16,689
Other countries						1		3		2					1				3	22
Grand total	25,884	60,071	91	3	138,033	9,648	19,200	16,807	24,081	53,425	20,516	42,041	9,495	1,060	5,880	1,902	2,754	1,381	2,058	1,285,349

VI.—Immigrant Aliens Admitted, Fiscal Year ended June 30, 1907, by Countries and Sex.

Country of last permanent residence.	Males.	Females.	Total.
.....	100,899	44,093	144,992
y.....	145,338	48,122	193,460
.....	4,383	2,013	6,396
a, Servia, and Montenegro.....	11,165	194	11,359
k.....	4,690	2,553	7,243
including Corsica.....	5,848	3,883	9,731
Empire.....	22,000	15,807	37,807
.....	35,151	1,429	36,580
cluding Sicily and Sardinia.....	224,598	61,133	285,731
ands.....	4,220	2,417	6,637
.....	14,376	7,757	22,133
l, including Cape Verde and Azore islands.....	5,788	3,820	9,608
ia.....	2,299	2,085	4,384
Empire, and Finland.....	169,786	89,157	258,943
cluding Canary and Balearic islands.....	4,132	1,652	5,784
.....	12,311	8,278	20,589
land.....	2,429	1,319	3,748
in Europe.....	20,173	594	20,767
Kingdom:			
land.....	35,449	21,188	56,637
and.....	19,027	15,503	34,530
land.....	12,750	6,990	19,740
es.....	1,747	913	2,660
urope.....	75	32	107
tal Europe.....	858,634	340,932	1,199,566
.....	864	97	961
.....	27,240	2,986	30,226
.....	869	29	898
in Asia.....	6,132	1,021	8,053
sia.....	324	62	386
tal Asia.....	35,429	5,095	40,524
.....	1,239	247	1,486
a, Tasmania, and New Zealand.....	1,562	385	1,947
slands, not specified.....	27	15	42
North America.....	17,691	2,227	19,918
Honduras.....	17	18	35
entral America.....	728	207	935
.....	1,229	177	1,406
merica.....	2,074	705	2,779
dies.....	11,328	5,361	16,689
untries.....	18	4	22
rand total.....	929,976	355,373	1,285,349

TABLE VII.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY DESTINATIONS AND RACES OR PEOPLES.

State or Territory.	African (black).	Armenian.	Bohemian and Moravian (Czech).	Bulgarian, Servian, and Montenegrin.	Chinese.	Croatian and Slovenian.	Cuban.	Dalmatian, Bosnian, and Herzegovinian.	Dutch and Flemish.	East Indian.	English.	Finnish.	French.	German.	Greek.	Hebrew.	Irish.	Italian (north).	Italian (south).	Japanese.	Korean.
Alabama	27		1	246		72	7	2	36		121	9	44	145	167	110	14	78	665		
Alaska	1			6		8		6		2	23	19	2	4	2	3	6	11	1	11	
Arizona		1	1	317	2	119	4	69			456	18	19	38	14	13	51	351	51	111	
Arkansas			13	156		97			10		23		4	87	15	24	15	36	160		
California	15	96	28	363	452	510	11	750	257	491	3,430	264	1,321	2,124	1,608	451	1,274	9,072	3,032	3,691	13
Colorado		4	213	208	21	861		307	33		334	88	63	1,996	444	174	124	1,306	1,186	65	
Connecticut	23	58	108	53	5	217	2	20	58		1,103	65	198	1,304	810	2,422	1,338	1,917	10,366	6	
Delaware	9					3					78	1	7	33	9	89	137	45	449		
District of Columbia	14		2	12	13	25	7		8		201		61	131	92	293	123	77	482	5	
Florida	2,007		1	3			3,358	3	8	2	204	9	20	64	220	32	16	17	807	7	
Georgia	8			2			4		5	1	62	5	4	56	196	229	12	22	20	1	
Hawaii					8			1	3		53		3	17	1		2			20,865	9
Idaho				8	4	18		1	5		128	52	7	68	67		10	67	63	42	
Illinois	16	187	3,675	5,347	19	6,586	7	1,798	2,454	8	2,352	362	471	10,105	5,070	7,837	2,141	5,139	10,183	100	
Indiana	1	2	33	1,405	3	731	7	36	399		305	30	119	757	321	355	140	475	386	2	
Indian Territory			58	94		18			1		9		14	14	3	5		191	69		
Iowa	3		175	78		114	2	6	480		391	9	41	1,038	200	250	150	300	124	6	
Kansas			110	50		475		1	55		227	1	169	1,658	98	38	89	335	112	2	
Kentucky	1		1	11		13	3		2		109		7	193	19	179	51	28	34	2	
Louisiana	28		5	131	1	198	34	35	25	1	136	9	177	166	45	164	57	57	2,005	3	
Maine	4	19		38		1	2		7		286	155	35	22	221	305	206	87	582		
Maryland	32	1	398	329	6	155	5	1	16		269		51	1,413	157	2,888	174	67	1,072	2	
Massachusetts	627	685	101	222	55	47	2	9	538	5	5,586	2,275	563	1,156	7,293	9,027	6,896	2,641	16,710	56	
Michigan	6	38	210	537	3	1,347		12	2,699	2	1,834	3,892	120	2,234	180	937	254	1,653	2,102	5	
Minnesota	2	7	225	699	1	2,078		255	282	2	693	2,721	78	1,334	105	888	201	511	808	4	
Mississippi	3		7	4	7	30	8	25	6		19	5	8	28	23	27	3	183	408	1	
Missouri	2	30	334	1,207	9	1,402	2	546	168	1	375	6	72	3,064	3,121	1,852	378	859	2,078	11	
Montana		1	15	341	1	319		122	28		434	165	37	226	12	13	362	246	125	41	
Nebraska			571	14		97		5	127		181	14	3	2,446	317	215	65	41	573	8	
Nevada				30	8	27		37			59	7	86	43	2	3	35	432	89	4	
New Hampshire	4	31	2	87	2	1	2		5		232	108	10	55	2,377	146	215	72	116		
New Jersey	166	137	306	387	1	577	10	499	999	8	2,484	288	234	5,955	1,100	5,157	2,392	1,335	15,650	9	
New Mexico			5	25		119		2	6		54	8	11	49	1	8	8	176	39	1	
New York	1,881	1,023	1,853	2,642	72	4,189	1,895	1,404	1,739	35	14,819	1,956	3,620	21,440	14,372	93,397	13,830	11,195	108,055	443	2
North Carolina	1		2				8				136			16	13	28	7	35	25	1	
North Dakota			53	13		6		2	37		224	34	13	1,995	34	127	47	5	19	1	

Ohio	4	11	1,328	4,423	5	5,476	2	114	173	.....	1,752	488	203	8,481	709	3,224	725	831	7,192	17	1
Oklahoma	.....	.....	65	.....	.....	.....	.....	.....	1	.....	24	1	1	270	6	1	10	6	2	.....	....
Oregon	.....	1	9	26	27	221	.....	76	85	31	152	224	20	492	228	127	99	292	296	447	....
Pennsylvania	116	83	1,495	5,461	7	16,737	52	664	277	5	6,440	393	783	12,971	2,681	15,296	5,585	7,586	45,882	22	....
Philippine Islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	2	.....	.....	1	.....	.....	.....	....
Porto Rico	130	.....	1	.....	.....	.....	26	2	14	.....	22	.....	87	36	.....	.....	.....	5	9	.....	....
Rhode Island	80	211	5	27	.....	8	1	.....	59	.....	1,671	27	247	161	287	691	739	264	3,547	.....	....
South Carolina	.....	.....	91	6	.....	60	2	.....	311	1	27	7	3	75	20	53	8	2	12	4	....
South Dakota	.....	1	34	14	.....	20	.....	32	127	.....	153	69	12	1,063	.....	16	45	29	7	.....	....
Tennessee	2	.....	4	13	.....	106	4	.....	2	.....	92	1	7	148	67	191	19	140	51	3	....
Texas	7	.....	1,295	1,038	1	156	5	18	45	.....	238	14	55	885	145	400	85	287	284	1,554	8
Utah	.....	.....	1	18	4	376	.....	13	166	.....	739	106	29	249	842	20	75	606	365	24	....
Vermont	.....	.....	.....	9	.....	8	.....	.....	2	.....	143	42	17	34	42	85	56	321	322	.....	....
Virginia	12	10	29	289	3	163	1	59	7	.....	374	4	14	126	268	224	61	80	301	7	....
Washington	1	3	35	152	25	630	.....	216	198	475	1,150	435	116	821	251	144	230	1,056	1,071	3,226	6
West Virginia	1	.....	104	241	.....	1,106	2	126	16	.....	253	13	60	198	575	56	15	363	3,184	.....	....
Wisconsin	.....	4	511	345	4	2,172	.....	86	486	2	334	357	22	4,357	1,306	968	93	306	1,289	3	....
Wyoming	1	.....	41	67	1	127	.....	33	2	.....	128	104	24	73	58	.....	37	238	37	11	....
Grand total	5,235	2,644	13,554	27,174	770	47,826	5,475	7,393	12,467	1,072	51,126	14,860	9,392	92,936	46,283	149,182	38,706	51,564	242,497	30,824	39

TABLE VII.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY DESTINATIONS AND RACES OR PEOPLES—Continued.

State or Territory.	Lithuanian.	Magyar.	Mexican.	Pacific Islander.	Polish.	Portuguese.	Roumanian.	Russian.	Ruthenian (Russniak).	Scandinavian (Norwegians, Danes, and Swedes).	Scotch.	Slovak.	Spanish.	Spanish-American.	Syrian.	Turkish.	Welsh.	West Indian (other than Cuban).	Other peoples.	Grand total.
Alabama	1	28			16			2	1	109	65	27	20		36	1	10	14	3	2,077
Alaska					1			24	1	20	3		8				1			163
Arizona		4			5	4				57	51	3	332	2	29		5		3	2,130
Arkansas					6			1		2	11	5			6		6			677
California	17	41	6	1	70	1,198	31	591	45	1,444	1,311	64	944	93	67	20	129	8	44	35,377
Colorado	8	36			188		3	132	17	444	174	79	17		5		52			8,582
Connecticut	1,463	2,217			6,425	56	179	625	765	996	437	1,049	15		175	62	30	16	58	34,641
Delaware	30	18			726			21	110	32	22	9					2			1,830
District of Columbia	2				12	1	1	14		25	46	1	11	25	15	1	1	4	2	1,707
Florida			14		3				3	51	20		1,380	1	35	2	2	164	3	8,456
Georgia	2	1			5	6				32	48	1	13	2	29	1	9	2	1	779
Hawaii		1				1,328		2		5	38		2,251				1			24,588
Idaho		2				6		2	2	248	25	2	243		5				111	1,186
Illinois	4,558	2,916		1	17,847	6	977	1,199	601	6,627	1,196	3,688	14	4	153	178	118	8	208	104,156
Indiana	184	1,708	1		1,056	1	1,747	14	39	131	297	326	3	4	387	39	41		114	11,599
Indian Territory	17	5			161			95	40	1	21	9			3		1			829
Iowa	76	12			52		7	16	1	1,893	96	19	3		73		23		1	5,639
Kansas	12	15			138		1	6	7	229	90	47	20		32	1	26			4,044
Kentucky	4	37			10		26			9	20		1	1	51	1	1		1	815
Louisiana	7	9	4		65		4	93	22	184	42	9	210	40	96	5	3	7	3	4,080
Maine	191	26		1	344	10	2	23	9	218	148	76	36		43	37	7	1	77	3,219
Maryland	544	280			2,032	1	243	877	263	136	112	245	9	1	6	7	24	10	17	11,843
Massachusetts	3,906	104	1		11,606	5,674	42	1,217	564	3,189	2,503	197	96	27	920	570	78	55	340	85,583
Michigan	242	1,346			5,717		271	108	164	1,526	605	540	3		150	9	46		35	28,827
Minnesota	19	62			735	1	87	74	117	7,974	251	204	2		84	1	47	1	6	20,559
Mississippi	1				3				4	27	13	3	15	2	65	9	3	5		945
Missouri	94	560	3		882		550	55	267	163	159	544	93	2	126	122	17	1	165	19,320
Montana	2	9			39		14	8	11	696	297	58	4		2		38		1	3,667
Nebraska	21	24			215			38	1	1,007	39	18	4	1	10		18	1		6,074
Nevada						23				38	8	8	161		1		3		55	1,159
New Hampshire	230	4			841	18	6	181	81	93	68	1	1		55	105	2		46	5,197
New Jersey	1,396	8,565	2		12,518	10	688	539	2,714	1,240	1,323	3,733	16	10	80	11	67	39	11	70,665
New Mexico		7								14	37	9	15		8		3			605
New York	4,176	10,573	50		31,571	513	1,081	5,747	5,090	10,197	5,525	4,692	2,500	704	1,512	421	632	888	510	386,244
North Carolina					1		2	8		6	51	1	1		47		1			390
North Dakota	7	26			93		18	141	78	2,871	101	3			26	2	12		2	5,990

Ohio	441	10,809			4,798	15	6,597	161	671	332	772	3,921	1	4	271	45	194	2	52	64,365
Oklahoma		1						4		10	13	2			18		3			438
Oregon	5	17	1		22	4	6	19	4	608	117	21	16	1	6	1	20		3	3,724
Pennsylvania	7,322	18,311			33,540	10	5,749	3,925	11,779	1,487	2,604	20,714	108	37	748	105	775	51	105	230,906
Philippine Islands											3		1							11
Porto Rico			8			2		1		2	8		451	77	17	1		97		996
Rhode Island	85	16			1,084	745	12	49	193	353	292	22	4		112	97	6	4	7	11,106
South Carolina	3	13			171				3	5	45	2			21	1			2	948
South Dakota	1	2			12			12	1	1,178	30	5			23		7			2,913
Tennessee		14			6			2		9	22	3	2		6					914
Texas	11	97			486	1	18	186	166	202	68	64	192	10	143	5	8			8,177
Utah		11			1		1			446	84	10	6		10		7		2	4,211
Vermont	53	112			750	9	5	101	43	85	286	41	77		6		78	2		2,729
Virginia	15	251			57	5	144	65	13	96	135	48	12	1	22	8	28		3	2,915
Washington	41	24			227	1	24	174	53	3,149	426	87	13	11	15	4	48	1	15	14,554
West Virginia	221	900	1		942		631	131	114	16	115	488	169		101	22	18		2	10,184
Wisconsin	471	809			2,501		33	111	20	3,308	155	917	1		14	3	94		43	21,215
Wyoming	5	48			53			13	4	205	88	26	1		15	5	9		7	1,461
Grand total	25,884	60,071	91	3	138,033	9,648	19,200	16,807	24,081	53,425	20,516	42,041	9,495	1,060	5,880	1,902	2,754	1,381	2,058	1,285,349

TABLE VIII.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY OCCUPATIONS AND RACES OR PEOPLES.

Occupation.	African (black).	Armenian.	Bohemian and Moravian (Czech).	Bulgarian, Servian, and Montenegrin.	Chinese.	Croatian and Slovenian.	Cuban.	Dalmatian, Bosnian, and Herzegovinian.	Dutch and Flemish.	East Indian.	English.	Finnish.	French.	German.	Greek.	Hebrew.	Irish.	Italian (north).	Italian (south).	Japanese.	Korean.
PROFESSIONAL.																					
Actors	3						38		14	3	347		50	134		27	22	24	7	31	
Architects	1	1	3			2			33		128		29	138	1	12	7	10	7	5	
Clergy	13	5	1	2		3		3	18	2	158	6	66	110	13	49	81	35	89	45	
Editors	2		1			2	7		1		53	2	5	9	2	5	6	3	2	9	
Electricians	2		10			4	3		20		207	1	19	103	1	69	50	25	66	3	
Engineers (professional)	6	5	3			6	25	1	87	1	657	9	189	473	6	54	56	29	21	24	
Lawyers	2					1	48	1	3		67	2	13	35	8	4	5	8	28	6	
Literary and scientific persons	2	2	2	1		1	18		9	3	86	2	25	131	11	63	21	8	16	3	
Musicians	18	2	16	1		2	12		13		111	1	28	159	7	178	5	102	282	3	
Officials (government)	4			2	2	2	39		2		53		11	53	2	1	6	3	5	28	
Physicians	5	1	1		1	2	46		9	3	74	3	20	69	8	17	14	15	56	35	
Sculptors and artists		3	8			1	20	1	20	3	86		76	158	3	66	10	101	48	17	
Teachers	47	19	5	4	2	6	10		16	3	283	11	211	194	17	269	122	23	33	108	
Other professional	46	5	20	3	54	3	25	1	16	8	372	10	60	230	8	231	116	19	41	293	6
Total	151	43	70	13	59	35	291	7	261	26	2,682	47	802	1,996	87	1,045	521	405	701	610	6
SKILLED.																					
Bakers	25	15	170	44		62	12	4	173		175	11	66	914	73	1,291	85	240	529	9	
Barbers and hairdressers	8	38	30	38		12	35	3	17		89		26	544	82	577	23	80	2,026	16	
Blacksmiths	53	30	174	67		84	2	5	84	2	362	22	46	772	57	934	160	197	970	7	
Bookbinders			13	1		5			2		23	2	3	74	3	475	5	1	12		
Brewers			27	1		5			7		19		4	250		31	4	5	2	2	
Butchers	8	8	254	20		48		3	93	1	274	1	37	940	24	1,474	75	73	275	1	
Cabinetmakers	6	2	8	4		11			11		91	2	9	84	5	479	12	13	70		
Carpenters and joiners	172	74	398	49		162	25	13	482	10	2,295	108	108	1,824	193	4,915	595	613	2,288	51	
Clerks and accountants	88	19	165	54		52	156	7	122	1	1,720	32	180	1,617	304	2,420	1,345	159	366	119	
Dressmakers	96	8	34	3		12	3	6	22		334	4	204	319	12	4,790	389	179	1,170	1	
Engineers (locomotive, marine, and stationary)	19	2	6	2		2	2	1	27		474	4	17	113	10	72	94	37	15	16	
Engravers		2					2				31		5	32		47		2	2		
Furriers and fur workers		3	12	12		4			1		8		8	59	52	521	2		3		
Gardeners	3	2	32	67		18		1	136		287	3	30	278	19	34	90	83	219	17	

Hat and cap makers	1		6	1		7	1		1		41		4	41	3	594	2	14	21	4	
Iron and steel workers	4	19	69	6		15			30		459	16	15	254	5	87	166	48	43		
Jewelers	5	5	2				3		5		50	2	19	16	4	168	4	12	17	2	1
Locksmiths		2	245	15		52		1	5		6	7	11	1,004	5	1,403	1	50	8		
Machinists	5	5	53	2		14	6		27		510	10	65	288	11	179	135	42	96	5	
Mariners	225		1	9		128	14	181	93		403	170	29	280	519	17	98	98	1,710	53	
Masons	57	10	233	40		171	4	10	105		1,623	6	37	936	104	369	256	1,711	3,352	7	
Mechanics (not specified)	19	3	10			16	47	2	26		256	9	90	226	29	106	76	139	337	1	
Metal workers (other than iron, steel, and tin)	6	5	14	1		3	1		20		146	6	24	118	17	330	9	20	72	1	
Millers		3	59	4		26	1		22		32	4	6	254	2	210	11	30	192	2	
Milliners	4	1	5			2			8		54		39	37	1	644	49	6	13		
Miners	4	2	414	45		315	1	19	52	1	2,546	120	378	752	38	30	430	2,267	1,025	41	
Painters and glaziers	25	5	76	6		13	11	4	140		589	27	43	524	20	2,287	89	70	266	6	2
Photographers	1	12		2		1	3	1	2	1	40	4	5	40	23	185	8	9	38	21	
Plasterers	1								12		431	2	11	14		10	117	30	9	3	
Plumbers	6						3		17		378	4	7	19	1	72	70	4	2	1	
Printers	17	3	6	4		3	3		23		162	3	16	128	9	376	40	18	141	8	
Saddlers and harnessmakers	9	2	42	3		13			3		38	1	6	135	4	308	27	8	37		
Seamstresses	347	9	55	2		9	10	2	33		45	36	32	291	11	2,087	147	84	1,542	1	
Shipwrights	3					1			5		67	2		8		2	20		2	1	
Shoemakers	72	186	293	88		119	2	4	50		199	29	38	764	198	2,606	88	433	5,422	10	
Stokers	5	5	37	13		22	2	2	12		125	9	9	166	53	6	77	26	70	3	
Stone-cutters	2	5	36			37		2	10		198	7	19	114	17	25	75	325	395		
Tailors	80	95	371	100	1	103	10	9	68		224	62	63	1,079	142	21,779	131	310	3,344	57	1
Tanners and curriers	1	4	19	17		14			3		16	12	9	84	21	240		8	45		
Textile workers (not specified)			28			5					509	4	5	67	1	18	51	3	4		
Tinners	2	10	38	2		7		1	12		28	4	3	226	7	930	7	10	112	2	
Tobacco workers	255	3	4	2		1	1,483		140		40		3	57	32	609	4	5	12	3	
Upholsterers		5	3						10		45	3	3	51	4	201	6	8	8		
Watch and clock makers		6	8	1					6		23	3	24	91	7	572	6	14	44	6	
Weavers and spinners	1	56	99	2		9			179		973	2	185	434	7	384	219	182	202	9	
Wheelwrights	7	1	53	13		23			11		62		6	256		43	14	6	10		
Woodworkers (not specified)			29	1		2	1		15		61	1	5	94	1	181	12	13	18	2	
Other skilled	31	8	76	7		24	24	5	92	2	599	9	123	411	35	434	68	77	200	58	
Total	1,674	673	3,707	748	1	1,632	1,867	286	2,414	18	17,160	763	2,075	17,079	2,165	55,552	5,392	7,762	26,756	546	4
MISCELLANEOUS.																					
Agents	2	1					9		35	1	310	2	55	56	6	77	51	14	8	1	
Bankers		1	1				3		13		123		15	31	1	3	7	2	8	11	
Draymen, hackmen, and teamsters	7		12			4	2		3		90		4	42	2	17	43	85	560		
Farm laborers	572	272	2,129	15,197		21,904	5	1,901	1,009	91	686	830	459	16,072	6,924	2,258	1,959	6,790	65,389	20,636	1
Farmers	35	121	107	753		941	6	250	574	23	502	44	289	1,395	399	115	875	1,727	1,557	817	
Fishermen	4			1				2	6		33	4	1	11	11	9	45	11	214	9	
Hotel keepers	1	1	2			1		2	2	1	36		12	51	20	33	14	13	3	39	
Laborers	725	350	557	9,367	2	14,742	48	4,624	1,942	816	3,780	7,856	550	6,803	33,444	7,760	11,217	20,604	80,095	1,334	9
Manufacturers									13		123	1	49	79	2	19	14	6	6	12	

TABLE VIII.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY OCCUPATIONS AND RACES OR PEOPLES—Continued.

Occupation.	African (black).	Armenian.	Bohemian and Moravian (Czech).	Bulgarian, Servian, and Montenegrin.	Chinese.	Croatian and Slovenian.	Cuban.	Dalmatian, Bosnian, and Herzegovinian.	Dutch and Flemish.	East Indian.	English.	Finnish.	French.	German.	Greek.	Hebrew.	Irish.	Italian (north).	Italian (south).	Japanese.	Korean.
MISCELLANEOUS—cont'd.																					
Merchants and dealers	51	79	38	61	285	25	378	11	246	17	1,184	12	337	2,522	361	3,534	302	486	1,399	772	6
Servants	882	243	1,904	161	2	3,055	86	121	548	5	3,520	3,169	1,260	10,878	815	8,822	12,152	3,380	11,832	166	2
Other miscellaneous	94	18	60	18	188	33	41	6	111	38	1,849	29	212	788	101	1,026	485	216	489	2,016	6
Total	2,373	1,086	4,810	25,558	477	40,705	578	6,917	4,502	992	12,236	11,947	3,243	38,728	42,086	23,673	27,164	33,334	161,560	25,813	24
No occupation (including women and children)	1,037	842	4,967	855	233	5,454	2,739	183	5,290	36	19,048	2,103	3,272	35,133	1,945	68,912	5,629	10,063	53,480	3,855	5
Grand total	5,235	2,644	13,554	27,174	770	47,826	5,475	7,393	12,467	1,072	51,126	14,860	9,392	92,936	46,283	149,182	38,706	51,564	242,497	30,824	39

Hat and cap makers													4	41	3	594	2	14	21	4		
Iron and steel workers	1		6	1		7	1		1		41		15	254	5	87	166	48	43			
Jewelers	4	19	69	6		15			30		459	16	19	16	4	168	4	12	17	2	1	
Locksmiths	5	5	2				3		5		50	2	11	1,004	5	1,403	1	50	8			
Machinists		2	245	15		52		1	5		6	7	65	288	11	179	135	42	96	5		
Mariners	5	5	53	2		14	6		27		510	10	29	280	519	17	98	98	1,710	53		
Masons	225		1	9		128	14	181	93		403	170	37	936	104	369	256	1,711	3,352	7		
Mechanics (not specified)	57	10	233	40		171	4	10	105		1,623	6	90	226	29	106	76	139	337	1		
	19	3	10			16	47	2	26		256	9										
Metal workers (other than iron, steel, and tin)	6	5	14	1		3	1		20		146	6	24	118	17	330	9	20	72	1		
Millers		3	59	4		26	1		22		32	4	6	254	2	210	11	30	192	2		
Milliners	4	1	5			2			8		54		39	37	1	644	49	6	13			
Miners	4	2	414	45		315	1	19	52	1	2,546	120	378	752	38	30	430	2,267	1,025	41		
Painters and glaziers	25	5	76	6		13	11	4	140		589	27	43	524	20	2,287	89	70	266	6	2	
Photographers	1	12		2		1	3	1	2	1	40	4	5	40	23	185	8	9	38	21		
Plasterers	1								12		431	2	11	14		10	117	30	9	3		
Plumbers	6						3		17		378	4	7	19	1	72	70	4	2	1		
Printers	17	3	6	4		3	3		23		162	3	16	128	9	376	40	18	141	8		
Saddlers and harnessmakers	9	2	42	3		13			3		38	1	6	135	4	308	27	8	37			
Seamstresses	347	9	55	2		9	10	2	33		45	36	32	291	11	2,087	147	84	1,542	1		
Shipwrights	3					1			5		67	2		8		2	20		2	1		
Shoemakers	72	186	293	88		119	2	4	50		199	29	38	764	198	2,606	88	433	5,422	10		
Stokers	5	5	37	13		22	2	2	12		125	9	9	166	53	6	77	26	70	3		
Stone-cutters	2	5	36			37		2	10		198	7	19	114	17	25	75	325	395			
Tailors	80	95	371	100	1	103	10	9	68		224	62	63	1,079	142	21,779	131	310	3,344	57	1	
Tanners and curriers	1	4	19	17		14			3		16	12	9	84	21	240		8	45			
Textile workers (not specified)			28			5					509	4	5	67	1	18	51	3	4			
Tinners	2	10	38	2		7		1	12		28	4	3	226	7	930	7	10	112	2		
Tobacco workers	255	3	4	2		1	1,483		140		40		3	57	32	609	4	5	12	3		
Upholsterers		5	3						10		45	3	3	51	4	201	6	8	8			
Watch and clock makers		6	8	1					6		23	3	24	91	7	572	6	14	44	6		
Weavers and spinners	1	56	99	2		9			179		973	2	185	434	7	384	219	182	202	9		
Wheelwrights	7	1	53	13		23			11		62		6	256		43	14	6	10			
Woodworkers (not specified)			29	1		2	1		15		61	1	5	94	1	181	12	13	18	2		
Other skilled	31	8	76	7		24	24	5	92	2	599	9	123	411	35	434	68	77	200	58		
Total	1,674	673	3,707	748	1	1,632	1,867	286	2,414	18	17,160	763	2,075	17,079	2,165	55,552	5,392	7,762	26,756	546	4	
MISCELLANEOUS.																						
Agents	2	1					9		35	1	310	2	55	56	6	77	51	14	8	1		
Bankers		1	1				3		13		123		15	31	1	3	7	2	8	11		
Draymen, hackmen, and teamsters	7		12			4	2		3		90		4	42	2	17	43	85	560			
Farm laborers	572	272	2,129	15,197		21,904	5	1,901	1,009	91	686	830	459	16,072	6,924	2,258	1,959	6,790	65,389	20,636	1	
Farmers	35	121	107	753		941	6	250	574	23	502	44	289	1,395	399	115	875	1,727	1,557	817		
Fishermen	4			1				2	6		33	4	1	11	11	9	45	11	214	9		
Hotel keepers	1	1	2			1		2	2	1	36		12	51	20	33	14	13	3	39		
Laborers	725	350	557	9,367	2	14,742	48	4,624	1,942	816	3,780	7,856	550	6,803	33,444	7,760	11,217	20,604	80,095	1,334	9	
Manufacturers									13		123	1	49	79	2	19	14	6	6	12		

TABLE VIII.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY OCCUPATIONS AND RACES OR PEOPLES—Continued.

Occupation.	Lithuanian.	Magyar.	Mexican.	Pacific Islander.	Polish.	Portuguese.	Roumanian.	Russian.	Ruthenian (Russniak).	Scandinavian (Norwegians, Danes, and Swedes).	Scotch.	Slovak.	Spanish.	Spanish-American.	Syrian.	Turkish.	Welsh.	West Indian (other than Cuban).	Other peoples.	Grand total.
SKILLED—continued.																				
Hat and cap makers	3	10			11		2	8		7	5	4	4		2					797
Iron and steel workers	60	69			140	3	7	13	6	124	521	17	33		2	3	15			2,249
Jewelers		2			4		1	2		5	4		1		3		3	3		343
Locksmiths	140	353			709	2	18	95	23	5		91	1		3			1	6	4,262
Machinists	18	78			53		8	23	2	229	276	16	31	9	2		16	10		2,224
Mariners	22	6	1		17	51	2	22	3	2,628	117	4	254	13	6	9	15	65	7	7,270
Masons	38	214			367	20	14	35	18	322	776	93	169		77	4	92	3	35	11,308
Mechanics (not specified)	10	21	1		40	1	1	2	1	108	74	3	70	5	2		7	4	3	1,745
Metal workers (other than iron, steel, and tin)	2	14			26	2		5	1	40	52	6	3		5		6	3	2	960
Millers	10	108			135	1	4	3	6	49	19	47	1				2		2	1,245
Milliners		10			11		2	4		6	16	1	1				3	3		920
Miners	380	101	2		474	8	21	48	18	200	1,074	136	132	1	6	1	369		1	11,452
Painters and glaziers	20	96			161	8	1	28	7	361	270	16	29	3	7	2	14	1	12	5,239
Photographers	1	16			13		1	8	2	21	12	1	3		1		2			477
Plasterers		1			1	1	1	1		4	324	1	2		4	1	31		1	1,013
Plumbers	2	2			1	1		7		16	282				1		10			906
Printers	1	33			23	2	2	6	1	65	66	4	4	3	3	1	3	5		1,182
Saddlers and harnessmakers	10	40			74	1	3	3	4	48	11	16	4					3		853
Seamstresses	2	45	1		194	5	1	6	6	367	20	12	10	1	28		2	63	2	5,508
Shipwrights						2				24	44							2		183
Shoemakers	116	522			836	15	52	76	56	232	60	256	33	3	167	11	2	12	9	13,059
Stokers	14	11	1		48	45	18	10	3	155	60	8	438	14	1	2	8		6	1,484
Stonecutters	5	13			29	6	3	9	1	161	401	13	55		11	1	70		7	2,052
Tailors	314	394			884	7	45	187	70	299	92	140	28	2	92	12	15	12	22	30,644
Tanners and curriers	5	35			30		2	7	3	27	5	53	1		4	1				666
Textile workers (not specified)	1	3			49	6			1	8	117	5			1		2			888
Tinners	5	38			61		3	6	1	58	17	24	6		3		11		1	1,635
Tobacco workers	2	7	5		5	2	1			17	3		379		7	2			1	3,084
Upholsterers	3	7			19			3		12	30	1					1		1	424
Watch and clock makers	6	11			12			2		47	17	2	2		3	1				914
Weavers and spinners	12	25			122	6	2	5	7	48	343	10	1		35	4	1		2	3,566
Wheelwrights	3	110			113		11	2	9	26	20	41	3		1		1	1		846

Woodworkers (not specified)	8	25	.....	.....	48	1	1	3	.....	31	34	6	1	.....	2	.....	.....	1	.....	597
Other skilled	7	76	1	.....	118	2	4	20	8	156	229	32	55	1	13	.....	14	8	6	3,033
Total	1,816	4,466	16	.....	8,073	338	422	1,121	433	9,960	8,560	1,618	2,616	98	788	108	1,008	390	210	190,315
MISCELLANEOUS.																				
Agents	.....	5	1	.....	3	.....	.....	4	1	28	57	.....	13	3	.....	1	4	7	.....	755
Bankers	.....	2	.....	.....	.....	.....	.....	.....	.....	6	20	.....	1	3	1	.....	.....	.....	.....	252
Draymen, hackmen, and teamsters	3	1	.....	.....	12	1	.....	2	.....	37	42	4	4	.....	3	1	1	.....	.....	982
Farm laborers	10,620	29,891	.....	.....	54,837	347	14,959	5,861	12,758	4,156	397	21,774	508	6	1,430	449	39	20	718	323,854
Farmers	122	189	.....	.....	303	22	29	109	17	1,039	190	101	176	19	407	95	50	30	48	13,476
Fishermen	2	3	.....	.....	4	77	.....	.....	.....	493	12	.....	16	.....	.....	4	2	1	5	980
Hotel keepers	1	5	.....	.....	1	.....	.....	1	.....	6	8	.....	4	.....	1	.....	4	.....	.....	262
Laborers	5,541	6,850	2	1	31,751	3,566	2,114	7,234	4,998	13,264	1,012	3,701	1,646	7	833	990	215	29	762	291,141
Manufacturers	.....	3	.....	.....	1	.....	2	.....	.....	9	32	.....	2	4	.....	1	1	1	.....	380
Merchants and dealers	19	160	17	.....	127	31	30	63	8	234	406	20	562	172	274	64	51	75	51	14,470
Servants	4,071	6,290	3	.....	20,689	1,368	524	479	3,951	12,155	1,274	6,675	292	45	442	16	191	95	24	121,587
Other miscellaneous	34	97	1	.....	144	12	15	59	9	332	780	40	82	20	21	5	73	21	17	9,586
Total	20,413	43,496	24	1	107,872	5,424	17,673	13,812	21,742	31,759	4,230	32,315	3,306	279	3,412	1,626	631	279	1,625	777,725
No occupation (including women and children)	3,628	11,860	36	1	21,815	3,855	1,087	1,759	1,895	11,059	6,942	8,077	3,384	579	1,636	148	1,028	648	191	304,709
Grand total	25,884	60,071	91	3	138,033	9,648	19,200	16,807	24,081	53,425	20,516	42,041	9,495	1,060	5,880	1,902	2,754	1,381	2,058	1,285,349

TABLE IX.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY DESTINATIONS AND OCCUPATIONS.

Occupation.	Alabama.	Alaska.	Arizona.	Arkansas.	California.	Colorado.	Connecticut.	Delaware.	District of Columbia.	Florida.	Georgia.	Hawaii.	Idaho.	Illinois.	Indiana.	Indian Territory.	Iowa.	Kansas.	Kentucky.
PROFESSIONAL.																			
Actors					17		5		3	44	1			39	1				
Architects					64	2	9		4			1		21	2		1	2	
Clergy	1	2	2		43	9	8	4	7	2	6	20	2	46	7		11	5	6
Editors					5		1		2	7				3	1				2
Electricians	2		1		49	2	17			2	1		2	55	3		4	4	
Engineers (professional)	3		13		104	14	23	2	6	9	7	5		112	7		2	3	2
Lawyers	1		1		10		2		3	8	1	1		9	1				1
Literary and scientific persons	1				15	3	3	1	2	3		2		23					
Musicians	1				8	2	19	1	1	12	1	1	1	68	7			2	
Officials (government)			2		21		1		21	26		1		9	2		3	1	
Physicians					33	1	4	2	4	16		4		23			1		
Sculptors and artists					31	1	5	1	1	2		1		49			3		1
Teachers	1	2	1	1	81	4	56		9	6	2	10	1	84	26		4	1	1
Other professional	5	1	8	1	323	10	17	4	12	21	5	47	3	132	7		4	3	5
Total	15	5	28	2	804	48	170	15	75	158	24	93	9	673	64		33	21	18
SKILLED.																			
Bakers	4		6	2	138	20	90	4	5	45	4	5	2	369	25		32	10	4
Barbers and hairdressers	4		2	1	32	5	110	4	12	49		8	1	203	9	1	4	3	1
Blacksmiths	2	2	16	1	153	22	164	14	2	14	4	6	6	631	50	6	44	16	2
Bookbinders					4	1	12							60			2	2	
Brewers	1				14	3	4				2			32	4				
Butchers	2	2	7		80	6	73	2	5	6	1	3	2	489	33	4	28	11	5
Cabinetmakers	1				34	4	13	1	2	1	2		3	87	4		4	3	1
Carpenters and joiners	23	5	32	8	1,639	64	413	21	25	110	9	19	41	1,496	81	8	83	43	6
Clerks and accountants	19	1	26	6	415	47	160	13	28	376	33	37	6	841	39	2	57	21	15
Dressmakers	8		3	1	88	7	145	13	7	21	7		6	366	22		21	5	9
Engineers (locomotive, marine, and stationary)	9		6	1	132	6	28	4	5	4	11	2		89	7	1	10	7	1
Engravers			1		4	1	7	1		2				8	1	1	1		1
Furriers and fur workers					1		7		1					32	2		2		1
Gardeners	1	2	4	1	69	8	37	2	3	3	1	2	3	118	17	3	22	2	2
Hat and cap makers					6	1	21	1		4				51			1	1	1
Iron and steel workers	5	1	6	2	67	10	55	2	1	2	1		2	161	13	2	4	1	1
Jewelers	1				4	2	3			3		1		19	2	1			
Locksmiths	3		1		37	8	99	8	3		1			465	22	5	8	6	5
Machinists	2		6	1	86	4	39	6	2	6	1		4	145	12	1	4	5	1
Mariners	65	2	8		419	27	88	5	2	458	21	5	14	196	9		22	2	1
Masons	13	2	56	3	1,083	83	284	15	16	32	5	9	9	749	64	7	42	20	4

Mechanics (not specified)													1	85	9		2	5	
Metal workers (other than iron, steel, and tin)	4		4	1	76	6	38	3	1	19	1								
Millers	1	1		1	20		49			1				50	3		2	1	1
Milliners	1		2	1	25	4	31	5					3	128	11	1	8	1	3
Miners	2		1		9	2	18		6		1			59	3		2		
Painters and glaziers	111	14	499	27	512	360	79	5	8	7	4		42	1,226	282	57	117	212	18
Photographers	4		1		217	9	107	5	6	20	8	6	2	330	17	1	16	3	8
Plasterers	1		1		22	1	2		2	3	1			24	1		1		
Plumbers					153		11	4	1	3	3	1	1	31			3		
Printers	1				161	2	15	3	2	4	3		1	48	1			1	1
Saddlers and harnessmakers	1			1	23	1	17		1	5	1	1		95	3		4	1	
Seamstresses			2		12	1	15		1				1	77	7		8	5	
Shipwrights	3	2	1	3	30	2	138	5	16	96	5	1		390	21	2	31	4	4
Shoemakers	1				15									5			2		
Stokers	20		3	1	152	30	422	20	27	35	9	5	8	851	58	4	28	20	13
Stonecutters	11	1	3		85	6	12	1		2	2		1	70	8		6	1	2
Tailors	1		3		86	17	40		5	1	6	2	3	87	5	1	8	1	
Tanners and currriers	14	1	3	9	168	35	492	27	43	41	19	4	4	1,702	58		38	12	30
Textile workers (not specified)					12		10	5	1					71	2		4		1
Tinners					2	1	22							31	3		4		
Tobacco workers	1		2		30		19	4	3				2	112	10		7	2	1
Upholsterers			1		3	2	18		2	2,074		3		47			2		1
Watch and clock makers					10	1	3	1	2					20			1	1	
Weavers and spinners	1			1	8	3	19		2		4	5		78	2		9	1	1
Wheelwrights	1		3	1	46	7	93	6		1			6	125	17	1	13	10	1
Woodworkers (not specified)	1		2		15	6	14	4			1			107	10		6	4	
Other skilled				1	12		6		2	1			1	41	5		3		
	3		11		248	7	68	3	5	51	3	11	3	211	31		14	6	3
Total	346	36	722	74	6,657	832	3,610	217	255	3,500	174	136	178	12,708	983	109	730	449	149
MISCELLANEOUS.																			
Agents	1		4		32	1	6	1	5	11	2			30	2			1	1
Bankers					18		1		2	2	1	1		4	1		1	1	1
Draymen, hackmen, and teamsters			2		44	2	33	1	1	2		1		72	6	1	9	2	
Farm laborers	587	17	212	252	5,068	2,011	9,090	586	233	696	56	18,715	254	28,218	4,912	412	856	688	108
Farmers	22	4	94	14	1,412	200	366	11	16	36	11	7	93	1,218	178	7	257	109	17
Fishermen		2			46	4	8	2	1	4		2	16	31	2		14	1	1
Hotel keepers					30	4	2		2	1		2	3	10	2			1	
Laborers	436	47	683	57	9,423	2,252	8,056	459	335	586	164	1,014	301	24,087	2,511	69	1,164	616	98
Manufacturers			1		9		4		3			2		15	1		1		
Merchants and dealers	20		17	5	906	64	154	6	36	193	31	60	2	664	39	1	58	28	11
Servants	60	14	60	34	1,699	549	4,552	218	179	401	37	34	63	10,470	571	24	657	302	65
Other miscellaneous	11	6	12		1,374	36	161	8	25	101	10	16	11	425	36	2	32	24	10
Total	1,137	90	1,085	362	20,061	5,123	22,433	1,292	838	2,033	312	19,854	743	65,244	8,261	516	3,049	1,773	312
No occupation (including women and children)	579	32	295	239	7,855	2,579	8,428	306	539	2,765	269	4,505	256	25,531	2,291	204	1,827	1,801	336
Grand total	2,077	163	2,130	677	35,377	8,582	34,641	1,830	1,707	8,456	779	24,588	1,186	104,156	11,599	829	5,639	4,044	815

TABLE IX.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY DESTINATIONS AND OCCUPATIONS—Continued.

Occupation.	Louisiana.	Maine.	Maryland.	Massachusetts.	Michigan.	Minnesota.	Mississippi.	Missouri.	Montana.	Nebraska.	Nevada.	New Hampshire.	New Jersey.	New Mexico.	New York	North Carolina.	North Dakota.	Ohio.	Oklahoma.
PROFESSIONAL.																			
Actors	1			10	9	1	1	4	1	4			4		612		1	3	
Architects			4	23	7	3		4		1			19		265	1	1	12	
Clergy	8	3	16	48	25	24	1	15	4	10	1	1	31	1	327		4	29	3
Editors				8		1		1					2		81			2	
Electricians		1	6	63	15	11		5	3	4		1	52	1	334	1	3	18	
Engineers (professional)	6	5	16	62	36	22	2	12	9	2	4	1	91	4	1,482	1	6	52	
Lawyers	2		3	12		2		1	2				7	1	217				
Literary and scientific persons	1		2	11	8	3		6	1		2		18		365		1	5	
Musicians	2	1	14	53	15	3		12	4	5			43		555		2	60	
Officials (government)	5		1	7				2					3		163		1	5	
Physicians	1		5	16	6	5		7	1	2	2		12		268		1	9	
Sculptors and artists	2	2	2	20	5	3		6				1	22		491		2	12	
Teachers	5	24	17	106	21	41	1	12	3	6	1	5	58		791		6	37	
Other professional	12	4	48	101	31	17	2	27	3	3	2	1	64		652	2	6	46	
Total	45	40	134	540	178	136	7	114	31	37	12	10	426	7	6,603	5	34	290	3
SKILLED.																			
Bakers	29	6	75	251	101	61	1	73	6	15	2	10	245	1	2,227	1	14	133	1
Barbers and hairdressers	24	8	53	308	41	14	2	55	2	8		5	229		2,146	1	8	145	
Blacksmiths	13	10	72	429	173	120	4	90	17	47	4	14	349	2	2,146	2	41	363	
Bookbinders	2		15	34	3	5		9	1	2		3	29		418	1	1	13	
Brewers	1		5	9	8	6		10	4	5		1	9		177		1	24	
Butchers	15	7	77	214	73	57		58	8	36	2	9	204	1	2,032	1	19	177	4
Cabinetmakers	1	2	17	69	32	30		9	1	3	2		39		492			36	
Carpenters and joiners	60	26	274	1,204	426	339	3	225	52	99	12	30	1,037	5	8,542	7	104	741	3
Clerks and accountants	41	27	115	683	150	210	7	124	34	44	9	22	501	2	5,880	12	49	215	1
Dressmakers	39	26	60	521	63	53	3	64	9	23	3	15	382	1	5,273	1	7	174	
Engineers (locomotive, marine, and stationary)	22	3	27	103	42	26		12	3	4		1	72	3	413	1	4	41	1
Engravers			2	8	2				2		1		11		64			6	
Furriers and fur workers			6	23	7	5		8		1			21		588		1	24	
Gardeners	30	5	15	122	57	33	2	27	6	13	2	3	85		639	3	7	88	1
Hat and cap makers	1		13	32	9	2		5		2		2	41		476			21	
Iron and steel workers		4	14	228	69	29		24	11	3	1	5	165	2	658	1	5	141	1
Jewelers	2		7	27	1	1		2				1	24	1	196			7	
Locksmiths	3	3	94	135	66	27	1	70	4	15	1	2	236	1	1,804		6	230	1
Machinists	7	7	19	205	81	50	4	15	4	5		5	100	3	803	3	10	104	
Mariners	162	27	61	449	80	101	23	67	10	2	12	8	273	1	3,468	1	29	65	1

Machinists	36	25	84	575	235	144	6	134	37	65	9	19	514	9	4,215	5	28	414	7
Mechanics (not specified)	2	1	11	91	17	17	.....	22	3	3	7	3	105	2	868	1	7	40	.....
Metal workers (other than iron, steel, and tin)	2	.....	4	62	12	6	.....	8	.....	1	.....	3	61	.....	493	1	1	23	.....
Millers	2	3	19	54	28	16	1	21	2	12	.....	.....	56	.....	420	1	3	80	.....
Milliners	4	.....	10	59	6	8	.....	6	.....	.....	1	1	35	1	538	.....	3	24	1
Miners	11	16	63	285	563	154	16	108	384	24	38	16	173	50	1,252	2	40	524	6
Painters and glaziers	9	9	57	311	97	65	1	45	7	14	.....	6	274	1	2,780	.....	25	123	.....
Photographers	1	.....	2	23	11	5	.....	9	.....	2	.....	.....	28	.....	245	2	2	10	.....
Plasterers	.....	1	5	45	16	3	.....	7	2	.....	1	.....	45	.....	556	.....	.....	6	.....
Plumbers	1	3	3	86	36	19	.....	9	3	4	4	5	46	1	291	.....	2	21	.....
Printers	.....	1	9	71	29	20	.....	6	1	2	.....	.....	59	.....	676	.....	4	29	.....
Saddlers and harnessmakers	1	.....	14	32	11	12	.....	10	1	4	.....	.....	48	.....	422	.....	2	39	.....
Seamstresses	9	10	79	367	43	61	.....	25	2	24	.....	8	337	.....	2,959	1	14	132	1
Shipwrights	1	.....	1	14	10	10	1	.....	.....	.....	.....	.....	11	.....	73	.....	2	6	.....
Shoemakers	57	21	155	1,075	155	96	6	152	21	60	6	27	718	4	5,863	1	30	499	5
Stokers	31	.....	11	50	21	26	2	18	2	2	1	5	96	.....	767	.....	2	36	.....
Stonecutters	4	47	8	202	38	48	1	11	9	8	3	14	67	.....	714	2	1	68	.....
Tailors	24	46	669	1,942	210	169	31	268	9	41	3	30	1,064	6	18,991	2	29	712	2
Tanners and curriers	.....	.....	7	46	8	4	.....	7	.....	1	.....	.....	53	.....	280	.....	1	31	.....
Textile workers (not specified)	1	28	1	445	4	1	.....	1	.....	1	.....	7	20	.....	72	.....	.....	12	.....
Tinners	3	1	17	70	17	7	1	18	1	3	.....	2	69	.....	956	.....	4	57	.....
Tobacco workers	4	.....	7	185	10	3	1	8	1	3	.....	7	28	.....	576	.....	4	10	.....
Upholsterers	.....	1	3	24	8	7	.....	3	1	.....	.....	.....	20	.....	252	2	1	9	.....
Watch and clock makers	2	.....	11	49	10	4	.....	2	.....	2	.....	1	46	.....	525	.....	1	21	.....
Weavers and spinners	3	47	9	798	60	23	1	21	2	9	2	28	298	2	874	14	3	65	.....
Wheelwrights	.....	.....	16	20	27	11	.....	26	.....	6	.....	1	53	.....	238	.....	6	64	.....
Woodworkers (not specified)	.....	1	13	42	17	9	.....	2	1	4	.....	1	34	.....	268	.....	2	22	.....
Other skilled	26	11	34	195	97	58	6	44	6	14	4	6	174	3	837	.....	9	146	.....
Total	686	433	2,393	12,272	3,280	2,175	124	1,938	669	636	130	326	8,584	102	85,443	69	532	5,971	36
MISCELLANEOUS.																			
Agents	5	.....	4	41	12	9	.....	6	3	3	1	.....	15	1	415	.....	2	15	1
Bankers	4	.....	2	8	.....	.....	.....	2	1	.....	.....	.....	1	.....	183	.....	.....	2	.....
Draymen, hackmen, and teamsters	3	.....	3	68	21	21	1	16	8	12	2	1	63	.....	387	.....	3	26	.....
Farm laborers	1,229	502	3,183	12,474	6,447	3,604	166	4,927	630	1,142	260	960	17,348	65	66,110	36	1,065	25,264	79
Farmers	46	21	52	653	402	396	18	218	168	143	99	34	395	18	2,559	6	211	463	29
Fishermen	8	2	2	31	41	116	2	28	12	9	.....	1	8	6	207	.....	44	5	.....
Hotel keepers	1	.....	1	6	4	1	.....	1	2	.....	.....	1	6	1	144	.....	.....	3	.....
Laborers	462	1,133	1,783	25,330	8,224	6,884	132	5,896	1,103	1,095	403	2,710	12,220	161	82,458	35	1,131	12,097	28
Manufacturers	5	.....	.....	13	4	1	.....	.....	.....	.....	.....	.....	15	1	256	3	.....	7	1
Merchants and dealers	90	30	106	580	153	84	10	153	21	21	15	10	450	6	8,314	11	23	248	4
Servants	143	353	949	11,848	2,658	2,701	45	1,080	348	550	48	483	8,121	43	40,933	32	847	4,801	27
Other miscellaneous	38	30	41	900	130	110	8	65	28	20	8	21	371	3	3,288	39	24	187	2
Total	2,034	2,071	6,126	51,952	18,096	13,927	382	12,392	2,324	2,905	836	4,221	39,013	305	205,254	162	3,350	43,118	171
No occupation (including women and children)	1,315	675	3,190	20,819	7,273	4,321	432	4,876	643	2,406	181	640	22,642	191	88,944	154	2,074	14,926	228
Grand total	4,080	3,219	11,843	85,583	28,827	20,559	945	19,320	3,667	6,074	1,159	5,197	70,665	605	386,244	390	5,990	64,305	438

TABLE IX.—IMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY DESTINATIONS AND OCCUPATIONS—Continued.

Occupation.	Louisiana.	Maine.	Maryland.	Massachusetts.	Michigan.	Minnesota.	Mississippi.	Missouri.	Montana.	Nebraska.	Nevada.	New Hampshire.	New Jersey.	New Mexico.	New York	North Carolina.	North Dakota.	Ohio.	Oklahoma.
PROFESSIONAL.																			
Actors	1			10	9	1	1	4	1	4			4		612		1	3	
Architects			4	23	7	3		4		1			19		265	1	1	12	
Clergy	8	3	16	48	25	24	1	15	4	10	1	1	31	1	327		4	29	3
Editors				8		1		1					2		81			2	
Electricians		1	6	63	15	11		5	3	4		1	52	1	334	1	3	18	
Engineers (professional)	6	5	16	62	36	22	2	12	9	2	4	1	91	4	1,482	1	6	52	
Lawyers	2		3	12		2		1	2				7	1	217				
Literary and scientific persons	1		2	11	8	3		6	1		2		18		365		1	5	
Musicians	2	1	14	53	15	3		12	4	5			43		555		2	60	
Officials (government)	5		1	7				2					3		163		1	5	
Physicians	1		5	16	6	5		7	1	2	2		12		268		1	9	
Sculptors and artists	2	2	2	20	5	3		6				1	22		491		2	12	
Teachers	5	24	17	106	21	41	1	12	3	6	1	5	58		791		6	37	
Other professional	12	4	48	101	31	17	2	27	3	3	2	1	64		652	2	6	46	
Total	45	40	134	540	178	136	7	114	31	37	12	10	426	7	6,603	5	34	290	3
SKILLED.																			
Bakers	29	6	75	251	101	61	1	73	6	15	2	10	245	1	2,227	1	14	133	1
Barbers and hairdressers	24	8	53	308	41	14	2	55	2	8		5	229		2,146	1	8	145	
Blacksmiths	13	10	72	429	173	120	4	90	17	47	4	14	349	2	2,146	2	41	363	
Bookbinders	2		15	34	3	5		9	1	2		3	29		418	1	1	13	
Brewers	1		5	9	8	6		10	4	5		1	9		177		1	24	
Butchers	15	7	77	214	73	57		58	8	36	2	9	204	1	2,032	1	19	177	4
Cabinetmakers	1	2	17	69	32	30		9	1	3	2		39		492			36	
Carpenters and joiners	60	26	274	1,204	426	339	3	225	52	99	12	30	1,037	5	8,542	7	104	741	3
Clerks and accountants	41	27	115	683	150	210	7	124	34	44	9	22	501	2	5,880	12	49	215	1
Dressmakers	39	26	60	521	63	53	3	64	9	23	3	15	382	1	5,273	1	7	174	
Engineers (locomotive, marine, and stationary)	22	3	27	103	42	26		12	3	4		1	72	3	413	1	4	41	1
Engravers			2	8	2				2		1		11		64			6	
Furriers and fur workers			6	23	7	5		8		1			21		588		1	24	
Gardeners	30	5	15	122	57	33	2	27	6	13	2	3	85		639	3	7	88	1
Hat and cap makers	1		13	32	9	2		5		2		2	41		476			21	
Iron and steel workers		4	14	228	69	29		24	11	3	1	5	165	2	658	1	5	141	1
Jewelers	2		7	27	1	1		2				1	24	1	196			7	
Locksmiths	3	3	94	135	66	27	1	70	4	15	1	2	236	1	1,804		6	230	1
Machinists	7	7	19	205	81	50	4	15	4	5		5	100	3	803	3	10	104	
Mariners	162	27	61	449	80	101	23	67	10	2	12	8	273	1	3,468	1	29	65	1

Mariners	60	405		13	58		15	1	22	28	4	24	286	55	117	3	7,270
Masons	33	1,583		6	82	12	10	8	88	45	44	19	84	75	152	10	11,308
Machanics (not specified)	3	145		22	31	2	1	1	8	23	4	6	8	8	25	3	1,745
Metal workers (other than iron, steel, and tin)	2	79		9	23		2	1	9	7	1	3	6	3	8		960
Millers	4	192			9		2	2	25	3	2	1	6	10	46	1	1,245
Milliners		88			9			1	1	5	1	1	5		9		920
Miners	20	2,563			33	1	21	32	127	457	19	15	396	262	104	97	11,452
Painters and glaziers	8	427		1	35	6	5	4	28	8	6	8	43	8	68		5,229
Photographers	4	46			5		1		6	2		1	10		3		477
Plasterers	3	73			6			1	2	4	3	1	19	1	1	1	1,013
Plumbers	8	69			10	6			2	4	5	1	16	1	6	1	906
Printers	3	70		2	13		1		2	4	1		13		10	2	1,182
Saddlers and harnessmakers	1	96			3		3	1	8	1	2	1	2	1	8	1	853
Seamstresses	8	456		20	60	6	6	5	15	17	2	10	14	7	52	4	5,508
Shipwrights	2	15				1				2			9		2		183
Shoemakers	18	1,803		12	148	3	12	6	70	17	13	20	46	67	167		13,059
Stokers	1	114			8			2	9	1	3	9	24	15	16	1	1,464
Stonecutters	10	171			9	2	2	1	4	9	224	2	42	8	54	3	2,082
Tailors	18	2,997		8	175	8	16	24	72	13	19	40	77	27	198	4	30,644
Tanners and curriers	1	82							7	1		1	7	2	21		666
Textile workers (not specified)	3	48			154		1		3	16	1		1	2	3		888
Tinners	1	161		2	9	1	1		7	3	2	2	9	5	13		1,635
Tobacco workers	1	62			1			1	3	2		3	5	2	4		3,084
Upholsterers		34			4			1	2			2	4		7		424
Watch and clock makers	2	75		3	7		2	1	5	1		1	2		7		914
Weavers and spinners	2	509			232	122	8	6	13	22	6	2	11	4	36	3	3,566
Wheelwrights	1	147			1	1	4	1	15	4	1		4	3	26		846
Woodworkers (not specified)		58			5	2	1		7	1	2	1	10	1	20	1	597
Other skilled	18	351		17	42		8	2	38	9	8	5	70	11	55	1	3,033
Total	413	21,333		268	1,821	248	230	155	1,163	956	452	310	2,960	743	2,318	172	190,315
MISCELLANEOUS.																	
Agents	2	59	1	10	16	1		3	12	2		5	6	2	6		755
Bankers	1	6				1		1	3			1	2		1		252
Draymen, hackmen, and teamsters	6	104			14	1	2		5	4	3	1	15	2	14		982
Farm laborers	658	85,503		45	1,478	146	493	97	3,284	691	598	875	1,454	4,152	5,663	255	323,854
Farmers	159	1,453		20	104	41	128	13	217	79	19	55	553	132	415	85	13,476
Fishermen	22	28			9		12	1		1			119	1	130	1	980
Hotel keepers	2	6			1		2		1				20		2		262
Laborers	988	53,764		26	2,547	75	524	130	918	1,240	710	673	5,439	3,077	4,925	462	291,141
Manufacturers	3	19		2	3				2		1	3	3		2		380
Merchants and dealers	69	943	3	75	75	16	18	27	133	18	12	35	300	24	89	9	14,470
Servants	277	19,180		38	1,422	74	431	36	349	238	247	144	828	397	1,827	100	121,587
Other miscellaneous	126	658		3	123	5	5	7	49	45	31	13	808	13	76	11	9,586
Total	2,313	161,723	4	219	5,792	360	1,615	315	4,973	2,318	1,621	1,805	9,547	7,800	13,150	923	777,725
No occupation (including women and children)	970	46,938	6	425	3,426	330	1,042	433	1,903	907	639	769	2,749	1,626	5,619	360	304,709
Grand total	3,724	230,906	11	996	11,106	948	2,913	914	8,177	4,211	2,729	2,915	14,554	10,184	21,215	1,461	1,285,349

In Table X, as presented this year, a return has been made to the plan followed prior to the year 1906, so as to furnish the number and nationality of immigrants arrived in the United States from 1857 to 1907, by years:

TABLE X.—IMMIGRANTS ARRIVED, FISCAL YEARS ENDED JUNE 30, 1857–1907, BY COUNTRIES.

Country.	1857	1858	1859	1860	1861	1862	1863	1864
Austria-Hungary	.....	.....	.....	.....	13	78	93	136
Belgium	1,011	160	137	30	100	124	136	411
Denmark	762	490	470	527	154	1,565	1,473	738
France	4,441	2,747	2,772	3,080	3,389	2,898	2,314	2,128
German Empire	86,407	69,586	46,635	43,946	52,116	23,811	29,741	41,155
Italy	1,046	1,414	1,051	920	954	621	514	694
Netherlands	986	1,201	168	342	369	339	349	520
Norway	1	.....	.....	.....	.....	.....	20	265
Portugal	116	203	85	88	92	22	104	48
Russian Empire and Finland	74	108	314	156	129	134	135	385
Spain	637	922	1,454	974	804	381	336	681
Sweden	881	2,645	1,850	629	287	1,021	1,179	1,192
Switzerland	1,713	1,671	866	676	1,243	587	696	1,022
United Kingdom:								
England	27,060	21,013	15,188	12,838	13,207	7,659	13,615	29,349
Ireland	59,370	41,500	34,410	40,547	43,351	16,800	36,545	69,161
Scotland	3,833	3,202	1,981	1,995	1,244	730	954	3,136
Wales	601	492	320	547	554	366	632	856
Europe, not specified	20,191	16,823	11,884	12,633	13,771	7,055	33,432	29,222
Total Europe	209,130	164,177	119,585	119,928	131,777	64,191	122,268	181,099
China	4,524	7,183	3,215	6,117	6,094	4,174	5,280	5,240
Other Asia	4	5	1	8	14	7	9	2
Total Asia	4,528	7,188	3,216	6,125	6,108	4,181	5,289	5,242
Africa	26	8	20	119	48	8	12	25
British North America	6,068	5,360	4,544	4,412	3,221	2,538	3,388	3,642
Central America	277	11	5	7	9	31	8	1
Mexico	401	342	301	243	207	197	101	78
South America	85	130	116	204	148	90	139	142
West Indies	808	922	718	1,158	853	543	575	494
All other countries	9,223	13,804	1,066	947	506	404	1,145	391
Grand total	230,546	191,942	129,571	133,143	142,877	72,183	132,925	191,114

Country.	1865	1866	1867	1868	1869	1870	1871	1872
Austria-Hungary	518	87	392	553	1,499	4,425	4,887	4,410
Belgium	282	1,515	1,173	97	1,922	1,002	774	738
Denmark	772	1,092	2,031	1,596	3,649	4,083	2,015	3,690
France	2,949	5,724	5,886	5,119	3,879	4,007	3,137	9,317
German Empire	58,153	120,218	124,076	122,677	131,042	118,225	82,554	141,109
Italy	594	1,318	1,585	1,549	1,489	2,893	2,816	4,190
Netherlands	572	1,613	2,598	718	1,134	1,066	993	1,909
Norway	84	9,220	2,510	4,296	16,068	13,216	9,418	11,421
Portugal	383	249	320	294	87	255	290	416
Russian Empire and Finland	217	999	618	376	527	1,130	1,208	2,665
Spain	902	613	862	876	1,123	663	558	595
Sweden	2,500	2,840	5,919	11,253	24,224	13,443	10,699	13,464
Switzerland	1,738	3,751	4,656	3,405	3,650	3,075	2,269	3,650
United Kingdom:								
England	25,964				35,673	60,957	56,530	69,764
Ireland	51,018	133,061	126,289	115,392	40,786	56,996	57,439	68,732
Scotland	3,195				7,751	12,521	11,984	13,916
Wales	332				660	1,011	899	1,214
Europe, not specified	19,599	13	15	9	40,380	29,216	16,078	65
Total Europe	169,772	282,313	278,930	268,210	315,543	328,184	264,548	351,265
China	3,702	1,872	3,519	6,707	12,874	15,740	7,135	7,788
Other Asia	11	25	60	63	68	85	102	37
Total Asia	3,713	1,897	3,579	6,770	12,942	15,825	7,237	7,825
Africa	46	32	26	21	72	31	23	38
British North America	3,763	37,419	18,128	5,373	21,117	40,411	47,082	40,176
Central America	1	6	5	2	3	33	4	8
Mexico	139	244	237	292	320	463	402	569
South America	128	225	266	197	90	69	96	101
West Indies	743	988	891	839	2,237	1,679	1,251	1,351
All other countries	2,034	9,453	1,042	485	444	508	707	3,473
Grand total	180,339	332,577	303,104	282,189	352,768	387,203	321,350	404,806

TABLE X.—IMMIGRANTS ARRIVED, FISCAL YEARS ENDED JUNE 30, 1857–1907, BY COUNTRIES—Continued.

Country.	1873	1874	1875	1876	1877	1878	1879
Austria-Hungary	7,112	8,850	7,658	6,276	5,396	5,150	5,963
Belgium	1,176	817	615	515	488	354	512
Denmark	4,931	3,082	2,656	1,547	1,695	2,105	3,474
France	14,798	9,643	8,321	8,002	5,856	4,159	4,655
German Empire	149,671	87,291	47,769	31,937	29,298	29,313	34,602
Italy	8,757	7,667	3,631	3,017	3,195	4,344	5,791
Netherlands	3,811	2,444	1,237	855	591	608	753
Norway	16,247	10,384	6,093	5,173	4,588	4,759	7,345
Portugal	24	60	763	471	1,291	660	392
Russian Empire and Finland	4,972	5,868	8,981	5,700	7,132	3,595	4,942
Spain	541	485	601	518	665	457	457
Sweden	14,303	5,712	5,573	5,603	4,991	5,390	11,001
Switzerland	3,107	3,093	1,814	1,549	1,686	1,808	3,161
United Kingdom:							
England	74,801	50,905	40,130	24,373	19,161	18,405	24,183
Ireland	77,344	53,707	37,957	19,575	14,569	15,932	20,013
Scotland	13,841	10,429	7,310	4,582	4,135	3,502	5,224
Wales	840	665	449	324	281	243	543
Europe, not specified	104	130	77	86	74	48	58
Total Europe	396,380	261,232	181,635	120,103	105,092	100,832	133,070
China	20,291	13,776	16,437	22,781	10,594	8,992	9,604
Other Asia	39	61	57	153	39	22	56
Total Asia	20,330	13,837	16,494	22,934	10,633	9,014	9,660
Africa	22	14	35	41	16	12	17
British North America	37,871	32,960	24,051	22,471	22,116	25,568	31,268
Central America	38	20	15	15	7	50	9
Mexico	606	386	610	631	445	465	556
South America	163	144	132	156	87	88	69
West Indies	1,657	1,829	1,832	1,413	1,390	1,019	1,123
All other countries	2,736	2,917	2,694	2,222	2,071	1,421	2,054
Grand total	459,803	313,339	227,498	169,986	141,857	138,469	177,826

Country.	1880	1881	1882	1883	1884	1885	1886
Austria-Hungary	17,267	27,935	29,150	27,625	36,571	27,309	28,680
Belgium	1,232	1,766	1,431	1,450	1,576	1,653	1,300
Denmark	6,576	9,117	11,618	10,319	9,202	6,100	6,225
France, including Corsica	4,313	5,227	6,003	4,821	3,608	3,495	3,318
German Empire	84,638	210,485	250,630	194,786	179,676	124,443	84,403
Gibraltar	.....	.....	.....	.....	.....	.....	8
Greece	.....	.....	.....	.....	.....	172	104
Italy, including Sicily and Sardinia	12,354	15,401	32,160	31,792	16,510	13,642	21,315
Malta	.....	.....	.....	.....	.....	4	7
Netherlands	3,340	8,597	9,517	5,249	4,198	2,689	2,314
Norway	19,895	22,705	29,101	23,398	16,974	12,356	12,759
Poland	.....	.....	.....	.....	.....	3,085	3,939
Portugal, including Cape Verde and Azore islands	260	171	42	176	701	2,024	1,194
Roumania	.....	.....	.....	.....	.....	803	494
Russian Empire and Finland	7,191	10,655	21,590	11,920	17,226	17,158	17,800
Spain	389	484	378	262	299	350	344
Sweden	39,186	49,760	64,607	38,277	26,552	22,248	27,751
Switzerland	6,156	11,293	10,844	12,751	9,386	5,895	4,805
Turkey in Europe	.....	.....	.....	.....	.....	138	176
United Kingdom:							
England	59,454	65,177	82,394	63,140	55,918	47,332	49,767
Ireland	71,603	72,342	76,432	81,486	63,344	51,795	49,619
Scotland	12,640	15,168	18,937	11,859	9,060	9,226	12,126
Wales	1,173	1,027	1,656	1,597	901	1,127	1,027
Europe, not specified	80	131	274	246	504	39	54
Total Europe	347,747	527,441	646,764	521,154	452,206	353,083	329,529
China	5,802	11,890	39,579	8,031	279	22	40
Other Asia	37	92	50	82	231	176	277
Total Asia	5,839	11,982	39,629	8,113	510	198	317
Africa	21	25	32	56	13	112	122
Australia, Tasmania, New Zealand, and Pacific islands, not specified	.....	.....	.....	.....	.....	679	1,136
British North America	99,706	125,391	98,295	70,241	60,584	38,291	.....
Central America	44	29	20	9	23	24	32
Mexico	492	325	366	469	430	323	.....
South America	88	110	91	77	65	44	246
West Indies	1,351	1,680	1,291	903	2,208	2,477	2,734
All other countries	1,969	2,448	2,504	2,300	2,553	115	87
Grand total	457,257	669,431	788,992	603,322	518,592	395,346	334,203

TABLE X.—IMMIGRANTS ARRIVED, FISCAL YEARS ENDED JUNE 30, 1857–1907, BY COUNTRIES—Continued.

Country.	1887	1888	1889	1890	1891	1892	1893
Austria-Hungary	40,265	45,814	34,174	56,199	71,042	76,937	57,420
Belgium	2,553	3,212	2,562	2,671	3,037	4,026	3,234
Denmark	8,524	8,962	8,699	9,366	10,659	10,125	7,729
France, including Corsica	5,034	6,454	5,918	6,585	6,770	4,678	3,621
German Empire	106,865	109,717	99,538	92,427	113,554	119,168	78,756
Gibraltar	12	18	13	9	13	.....	.....
Greece	313	782	158	524	1,105	660	1,072
Italy, including Sicily and Sardinia	47,622	51,558	25,307	52,003	76,055	61,631	72,145
Malta	1	3	.....	1	6	.....	.....
Netherlands	4,506	5,845	6,460	4,326	5,206	6,141	6,190
Norway	16,269	18,264	13,390	11,370	12,568	14,325	15,515
Poland	6,128	5,826	4,922	11,073	27,497	40,536	16,374
Portugal, including Cape Verde and Azores islands	1,360	1,625	2,024	2,600	2,999	3,400	4,631
Roumania	2,045	1,186	893	517	957	.....	.....
Russian Empire and Finland	30,766	33,487	33,916	35,598	47,426	81,511	42,310
Spain	436	526	526	813	905	4,078	206
Sweden	42,836	54,698	35,415	29,632	36,880	41,845	35,710
Switzerland	5,214	7,737	7,070	6,993	6,811	6,886	4,744
Turkey in Europe	206	207	252	206	265	1,331	625
United Kingdom:							
England	72,855	82,574	68,503	57,020	53,600	34,309	27,931
Ireland	68,370	73,513	65,557	53,024	55,706	51,383	43,578
Scotland	18,699	24,457	18,296	12,041	12,557	7,177	6,215
Wales	1,820	1,654	1,181	650	424	729	1,043
Europe, not specified	130	12	16	32	43	.....	.....
Total Europe	482,829	538,131	434,790	445,680	546,085	570,876	429,130
China	10	26	118	1,716	2,836	(a)	472
Japan	.....	.....	.....	.....	.....	.....	1,360
Other Asia	605	817	1,607	2,732	4,842	(a)	549
Total Asia	615	843	1,725	4,448	7,678	(a)	2,382
Africa	40	65	187	112	103	(a)	(a)
Australia, Tasmania, New Zealand, and Pacific islands, not specified	1,282	2,387	2,196	1,167	1,301	(a)	(a)
Central America	23	67	88	147	285	(a)	(a)
South America	366	440	427	438	664	(a)	(a)
West Indies	4,876	4,880	4,923	3,070	3,906	(a)	2,593
All other countries	78	76	91	240	297	8,787	5,606
Grand total	490,109	546,889	444,427	455,302	560,319	579,663	439,730

Country.	1894	1895	1896	1897	1898	1899	1900
Austria-Hungary	38,638	33,401	65,103	33,031	39,797	62,491	114,847
Belgium	1,709	1,058	1,261	760	695	1,101	1,196
Denmark	5,003	3,910	3,167	2,085	1,946	2,690	2,926
France, including Corsica	3,080	2,628	2,463	2,107	1,990	1,694	1,739
German Empire	53,989	32,173	31,885	22,533	17,111	17,476	18,507
Greece	1,356	597	2,175	571	2,339	2,333	3,771
Italy, including Sicily and Sardinia	42,977	35,427	68,060	59,431	58,613	77,419	100,135
Netherlands	1,820	1,388	1,583	890	767	1,029	1,735
Norway	9,111	7,580	8,855	5,842	4,938	6,705	9,575
Poland	1,941	791	691	4,165	4,726	(b)	(b)
Portugal, including Cape Verde and Azores islands	2,196	1,452	2,766	1,874	1,717	2,054	4,234
Roumania	729	523	785	791	900	1,606	6,459
Russian Empire and Finland	39,278	35,907	51,445	25,816	29,828	60,982	90,787
Servia, Bulgaria, and Montenegro	.....	.....	.....	.....	.....	52	108
Spain	925	501	351	448	577	385	355
Sweden	18,286	15,361	21,177	13,162	12,398	12,797	18,650
Switzerland	2,905	2,239	2,304	1,566	1,246	1,326	1,152
Turkey in Europe	298	245	169	152	176	80	285
United Kingdom:							
England	17,747	23,443	19,492	9,974	9,877	10,402	9,951
Ireland	30,231	46,304	40,262	28,421	25,128	31,673	35,730
Scotland	3,772	3,788	3,483	1,883	1,797	1,724	1,792
Wales	1,001	1,602	1,581	870	1,219	1,324	764
Europe, not specified	60	24	9	25	1	6	2
Total Europe	277,052	250,342	329,067	216,397	217,786	297,349	424,700

[a] Included in "All other countries."
[b] *Beginning with 1899,* Polish immigrants have been included in the countries to which they belong.

TABLE X.—IMMIGRANTS ARRIVED, FISCAL YEARS ENDED JUNE 30, 1857–1907, BY COUNTRIES—Continued.

Country.	1894	1895	1896	1897	1898	1899	1900
China	1,170	539	1,441	3,363	2,071	1,660	1,247
Japan	1,931	1,150	1,110	1,526	2,230	2,844	12,635
Other Asia	1,589	2,806	4,213	4,773	4,336	4,468	4,064
Total Asia	4,690	4,495	6,764	9,662	8,637	8,972	17,946
Africa	24	36	21	37	48	51	30
Australia, Tasmania, New Zealand, and Pacific islands, not specified	244	141	112	199	201	.....	.....
British North America	194	239	273	290	350	1,322	396
Central America	32	21	17	6	7	159	42
Mexico	109	116	150	91	107	161	237
South America	39	36	35	49	39	89	124
West Indies	3,177	3,096	6,828	4,101	2,124	2,585	4,656
All other countries	70	14	.....	.....	.....	1,027	441
Grand total	285,631	258,536	343,267	230,832	229,299	311,715	448,572

Country.	1901	1902	1903	1904	1905	1906	1907
Austria-Hungary	113,390	171,989	206,011	177,156	275,693	265,138	338,452
Belgium	1,579	2,577	3,450	3,976	5,302	5,099	6,396
Denmark	3,655	5,660	7,158	8,525	8,970	7,741	7,243
France, including Corsica	3,150	3,117	5,578	9,406	10,168	9,386	9,731
German Empire	21,651	28,304	40,086	46,380	40,574	37,564	37,807
Greece	5,910	8,104	14,090	11,343	10,515	19,489	36,580
Italy, including Sicily and Sardinia	135,996	178,375	230,622	193,296	221,479	273,120	285,731
Netherlands	2,349	2,284	3,998	4,916	4,954	4,946	6,637
Norway	12,248	17,484	24,461	23,808	25,064	21,730	22,133
Poland	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Portugal, including Cape Verde and Azores islands	4,165	5,307	9,317	6,715	5,028	8,517	9,608
Roumania	7,155	7,196	9,310	7,087	4,437	4,476	4,384
Russian Empire and Finland	85,257	107,347	136,093	145,141	184,897	215,665	258,943
Servia, Bulgaria, and Montenegro	657	851	1,761	1,325	2,043	4,666	11,359
Spain	592	975	2,080	3,996	2,600	1,921	5,784
Sweden	23,331	30,894	46,028	27,763	26,591	23,310	20,589
Switzerland	2,201	2,344	3,983	5,023	4,269	3,846	3,748
Turkey in Europe	387	187	1,529	4,344	4,542	9,510	20,767
United Kingdom:							
England	12,214	13,575	26,219	38,626	64,709	49,491	56,637
Ireland	30,561	29,138	35,310	36,142	52,945	34,995	34,530
Scotland	2,070	2,560	6,143	11,092	16,977	15,866	19,740
Wales	701	763	1,275	1,730	2,503	1,841	2,660
Europe, not specified	18	37	5	143	13	48	107
Total Europe	469,237	619,068	814,507	767,933	974,273	1,018,365	1,199,566
China	2,459	1,649	2,209	4,309	2,166	1,544	961
Japan	5,269	14,270	19,968	14,264	10,331	13,835	30,226
Other Asia	5,865	6,352	7,789	7,613	11,428	6,921	9,337
Total Asia	13,593	22,271	29,966	26,186	23,925	22,300	40,524
Africa	173	37	176	686	757	712	1,486
Australia, Tasmania, New Zealand, and Pacific islands, not specified	498	566	1,349	1,555	2,166	1,733	1,989
British North America	540	636	1,058	2,837	2,168	5,063	19,918
Central America	150	305	678	714	1,195	1,140	970
Mexico	347	709	528	1,009	2,637	1,997	1,406
South America	203	337	589	1,667	2,576	2,757	2,779
West Indies	3,176	4,711	8,170	10,193	16,641	13,656	16,689
All other countries	1	103	25	90	161	33,012	22
Grand total	487,918	648,743	857,046	812,870	1,026,499	1,100,735	1,285,349

a Beginning with 1899, Polish immigrants have been included in the countries to which they belong.

Tables XI to XIII, inclusive, correspond with those bearing similar numbers heretofore published, and will be found of value in the study of the problem of immigration in its various features.

TABLE XI.—IMMIGRANT ALIENS ADMITTED, CALENDAR YEAR 1906, BY COUNTRIES AND SEX.

Country of last permanent residence.	Males.	Females.	Total.
Austria	87,779	39,978	127,757
Hungary	124,071	44,380	168,451
Belgium	4,120	1,802	5,922
Bulgaria, Servia, and Montenegro	5,729	150	5,879
Denmark	4,999	2,655	7,654
France, including Corsica	5,318	3,585	8,903
German Empire	22,453	16,385	38,838
Greece	26,853	1,273	28,126
Italy, including Sicily and Sardinia	230,524	61,697	292,221
Netherlands	3,285	2,030	5,315
Norway	14,560	7,699	22,259
Portugal, including Cape Verde and Azore islands	4,939	3,227	8,166
Roumania	2,197	2,016	4,213
Russian Empire and Finland	160,272	102,997	263,269
Spain, including Canary and Balearic islands	2,033	440	2,473
Sweden	13,134	8,981	22,115
Switzerland	2,336	1,319	3,655
Turkey in Europe	12,545	613	13,158
United Kingdom:			
England	32,672	19,384	52,056
Ireland	19,023	16,193	35,216
Scotland	11,672	5,893	17,565
Wales	1,519	740	2,259
Other Europe	51	30	81
Total Europe	792,084	343,467	1,135,551
China	875	119	994
Japan	19,100	1,861	20,961
India	450	32	482
Turkey in Asia	4,167	1,769	5,936
Other Asia	372	64	436
Total Asia	24,964	3,845	28,809
Africa	831	180	1,011
Australia, Tasmania, and New Zealand	1,325	411	1,736
Pacific islands, not specified	18	12	30
British North America	13,519	1,631	15,150
British Honduras	37	35	72
Other Central America	822	239	1,061
Mexico	1,396	254	1,650
South America	1,883	722	2,605
West Indies	9,991	4,962	14,953
Other countries	10,474	1,734	12,208
Grand total	857,344	357,492	1,214,836

TABLE XII.—IMMIGRATION EACH YEAR, 1820–1907.

Period.	Number.
Year ended September 30—	
1820	8,385
1821	9,127
1822	6,911
1823	6,354
1824	7,912
1825	10,199
1826	10,837
1827	18,875
1828	27,382
1829	22,520
1830	23,322
1831	22,633
October 1, 1831, to December 31, 1832	60,482
Year ended December 31—	
1833	58,640
1834	65,365
1835	45,374
1836	76,242
1837	79,340
1838	38,914
1839	68,069
1840	84,066
1841	80,289
1842	104,565
January 1 to September 30, 1843	52,496
Year ended September 30—	
1844	78,615
1845	114,371
1846	154,416
1847	234,968
1848	226,527
1849	297,024
1850	310,004
October 1 to December 31, 1850	59,976
Year ended December 31—	
1851	379,466
1852	371,603
1853	368,645
1854	427,833
1855	200,877
1856	195,857
January 1 to June 30, 1857	112,123
Year ended June 30—	
1858	191,942
1859	129,571
1860	133,143
1861	142,877
1862	72,183
Year ended June 30—Continued.	
1863	132,925
1864	191,114
1865	180,339
1866	332,577
1867	303,104
1868	282,189
1869	352,768
1870	387,203
1871	321,350
1872	404,806
1873	459,803
1874	313,339
1875	227,498
1876	169,986
1877	141,857
1878	138,469
1879	177,826
1880	457,257
1881	669,431
1882	788,992
1883	603,322
1884	518,592
1885	395,346
1886	334,203
1887	490,109
1888	546,889
1889	444,427
1890	455,302
1891	560,319
1892	579,663
1893	439,730
1894	285,631
1895	258,536
1896	343,267
1897	230,832
1898	229,299
1899	311,715
1900	448,572
1901	487,918
1902	648,743
1903	857,046
1904	812,870
1905	1,026,499
1906	1,100,735
1907	1,285,349
Grand total	25,318,067

TABLE XIII.—IMMIGRANT ALIENS ADMITTED, SIX MONTHS ENDED DECEMBER 31, 1906, AND SIX MONTHS ENDED JUNE 30, 1907, BY COUNTRIES.

Country of last permanent residence.	6 months ended Dec. 31, 1906.			6 months ended June 30, 1907.		
	Males.	Females.	Total.	Males.	Females.	Total.
Austria	39,401	20,273	59,674	61,498	23,820	85,318
Hungary	47,857	22,190	70,047	97,481	25,932	123,413
Belgium	1,794	921	2,715	2,589	1,092	3,681
Bulgaria, Servia, and Montenegro	2,434	86	2,520	8,731	108	8,839
Denmark	1,670	1,286	2,956	3,020	1,267	4,287
France, including Corsica	2,974	2,199	5,173	2,874	1,684	4,558
German Empire	10,964	8,723	19,687	11,036	7,084	18,120
Greece	15,199	717	15,916	19,952	712	20,664
Italy, including Sicily and Sardinia	76,226	32,186	108,412	148,372	28,947	177,319
Netherlands	1,218	775	1,993	3,002	1,642	4,644
Norway	4,807	4,039	8,846	9,569	3,718	13,287
Portugal, including Cape Verde and Azore islands	1,913	1,337	3,250	3,875	2,483	6,358
Roumania	1,081	1,119	2,200	1,218	966	2,184
Russian Empire and Finland	75,258	51,500	126,758	94,528	37,657	132,185
Spain, including Canary and Balearic islands	1,235	300	1,535	2,897	1,352	4,249
Sweden	5,405	4,972	10,377	6,906	3,306	10,212
Switzerland	924	666	1,590	1,505	653	2,158
Turkey in Europe	6,549	382	6,931	13,624	212	13,836
United Kingdom:						
England	16,214	10,946	27,160	19,235	10,242	29,477
Ireland	7,480	7,549	15,029	11,547	7,954	19,501
Scotland	5,048	3,199	8,247	7,702	3,791	11,493
Wales	763	483	1,246	984	430	1,414
Other Europe	28	17	45	47	15	62
Total Europe	326,442	175,865	502,307	532,192	165,067	697,259
China	435	62	497	429	35	464
Japan	10,492	1,060	11,552	16,748	1,926	18,674
India	336	15	351	533	14	547
Turkey in Asia	2,556	1,160	3,716	3,576	761	4,337
Other Asia	241	50	291	83	12	95
Total Asia	14,060	2,347	16,407	21,369	2,748	24,117
Africa	485	101	586	754	146	900
Australia, Tasmania, and New Zealand	790	185	975	772	200	972
Pacific islands, not specified	9	7	16	18	8	26
British North America	9,730	1,094	10,824	7,961	1,133	9,094
British Honduras	2	1	3	15	17	32
Other Central America	339	110	449	389	97	486
Mexico	687	108	795	542	69	611
South America	916	328	1,244	1,158	377	1,535
West Indies	5,151	2,623	7,774	6,177	2,738	8,915
Other countries	13	4	17	5	.....	5
Grand total	358,624	182,773	541,397	571,352	172,600	743,952

Other Central America	8	10	.....	3	116	167	.....	51	1	1	.....	.....	1	95	2	6	.....	112	.....	579
Mexico	8	8	1	1	168	188	.....	184	4	.....	1	.....	2	261	7	21	.....	241	1	1,096
South America	7	14	.....	.....	207	166	.....	41	7	3	.....	.....	1	27	1	9	.....	162	.....	645
West Indies	4	14	.....	12	430	85	4	117	13	24	8	1	6	352	7	5	.....	697	6	1,785
United States	4	1	.....	.....	3	7	.....	13	1	1	.....	.....	.....	1	.....	.....	.....	14	.....	45
Grand total	728	190	9	49	1,774	1,741	39	3,143	131	253	42	7	230	861	115	125	23	7,240	17	16,717
Male	629	153	7	34	1,339	1,371	37	2,911	114	243	27	5	188	650	93	92	23	5,545	15	13,476
Female	99	37	2	15	435	370	2	232	17	10	15	2	42	211	22	33	.....	1,695	2	3,241

Country of last permanent residence.	China.	Japan.	India.	Turkey in Asia.	Other Asia.	Total Asia.	Africa.	Australia, Tasmania, and New Zealand.	Pacific islands, not specified.	British North America.	British Honduras.	Other Central America.	Mexico.	South America.	West Indies.	United States.	Other countries.	Grand total.	Male.	Female.
Austria-Hungary	.....	1	.....	.....	.....	1	.....	4	.....	4,445	.....	3	24	2	4	.....	1	4,988	4,052	936
Belgium	1	10	.....	.....	.....	11	.....	1	1	201	.....	13	15	1	8	.....	.....	335	269	66
Bulgaria, Servia, and Montenegro	.....	.....	.....	.....	.....	.....	.....	.....	.....	442	.....	.....	.....	.....	.....	.....	.....	447	445	2
Denmark	.....	1	.....	.....	1	2	.....	.....	.....	86	1	6	2	1	6	.....	8	138	95	43
France, including Corsica	1	20	.....	1	.....	22	.....	15	19	743	2	81	309	89	184	.....	.....	2,147	1,508	639
German Empire	8	31	.....	.....	.....	39	.....	4	13	548	6	106	145	73	69	.....	4	2,027	1,549	478
Greece	.....	.....	.....	.....	.....	.....	.....	.....	.....	383	.....	3	6	.....	4	.....	.....	406	389	17
Italy, including Sicily and Sardinia	.....	3	.....	.....	.....	3	.....	.....	.....	8,921	.....	15	197	17	32	.....	4	9,533	8,579	954
Netherlands	1	.....	.....	.....	.....	1	.....	.....	.....	109	.....	.....	3	3	6	.....	3	208	163	45
Norway	1	1	.....	.....	.....	2	.....	.....	.....	315	.....	2	4	.....	28	.....	.....	548	458	90
Portugal, including Cape Verde and Azore islands	.....	2	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	8	.....	25	69	54	15
Roumania	.....	.....	.....	.....	.....	.....	.....	.....	.....	176	.....	.....	.....	1	1	.....	.....	182	123	59
Russian Empire	.....	6	.....	.....	.....	6	.....	1	.....	3,744	.....	3	6	.....	1	.....	3	3,854	2,480	1,374
Spain, including Canary and Balearic islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	4	23	403	31	504	.....	7	1,124	860	264
Sweden	.....	.....	.....	.....	.....	.....	.....	.....	.....	274	.....	4	2	1	2	.....	1	355	266	89
Switzerland	.....	2	.....	.....	.....	2	.....	.....	.....	69	.....	14	15	3	3	.....	.....	180	128	52
Turkey in Europe	.....	.....	.....	.....	.....	.....	.....	.....	.....	472	.....	1	9	1	.....	.....	.....	488	476	12
United Kingdom	84	153	7	.....	3	247	1	218	11	11,460	41	97	348	69	375	.....	4	16,472	12,140	4,332
Other Europe	.....	.....	.....	.....	.....	.....	.....	.....	.....	131	.....	.....	2	6	6	.....	.....	155	120	35
Total Europe	96	230	7	1	4	338	1	243	44	32,545	54	371	1,490	298	1,241	.....	60	43,656	34,154	9,502

TABLE XIV.—NONIMMIGRANT ALIENS ADMITTED, FISCAL YEAR ENDED JUNE 30, 1907, BY COUNTRIES OF LAST PERMANENT RESIDENCE AND COUNTRIES OF FINAL DESTINATION—Continued.

Country of last permanent residence.	China.	Japan.	India.	Turkey in Asia.	Other Asia.	Total Asia.	Africa.	Australia, Tasmania, and New Zealand.	Pacific islands, not specified.	British North America.	British Honduras.	Other Central America.	Mexico.	South America.	West Indies.	United States.	Other countries.	Grand total.	Male.	Female.
China	117	1				118		2		9			101		385			800	750	50
Japan	2	146				148				193			58	6				612	537	75
India			65			65		1		5			1					108	98	18
Turkey in Asia				12		12				220		5	13	1				255	197	50
Other Asia					14	14				3			1		2			23	11	12
Total Asia	119	147	65	12	14	357		3		430		5	174	7	387			1,798	1,593	205
Africa		1				1	15			49		2	8	1	1			86	69	17
Australia, Tasmania, and New Zealand		1				1		397		33			4	4				804	517	287
Pacific Islands, not specified								1	19			1					6	39	30	9
British North America		15	1	107		123	1	5		2,622		2	14	7	36		6	7,571	6,410	1,161
British Honduras								1		1	33	5	3		3		11	77	54	23
Other Central America	60		4	1		65	1	3		53	10	544	24	2	43		95	1,419	1,013	406
Mexico	103	4		8	5	120		6		97	1	5	1,223	17	13		46	2,624	2,006	618
South America	15	9		6		30		2		107		2	59	479	96		85	1,505	1,064	441
West Indies	314	3		15		332	5	1	7	874	6	18	13	51	1,480		70	4,642	3,353	1,289
United States	2	1				3				140	1	3	16	2	3	88,674		88,887	66,920	21,967
Other countries																	12	12	12	
Grand total	709	411	77	150	23	1,370	23	662	70	36,951	105	958	3,028	868	3,303	88,674	391	153,120		
Male	673	345	69	131	11	1,229	22	452	55	28,748	70	690	2,321	638	2,483	66,716	295		117,195	
Female	36	66	8	19	12	141	1	210	15	8,203	35	268	707	230	820	21,958	96			35,925

Other Central America	8	16	.....	3	116	167	.....	51	1	1	.....	.....	1	95	2	6	.....	112	.....	579
Mexico	8	8	1	1	168	188	.....	184	4	.....	1	.....	2	261	7	21	.....	241	1	1,096
South America	7	14	.....	.....	207	166	.....	41	7	3	.....	.....	1	27	1	9	.....	162	.....	645
West Indies	4	14	.....	12	430	85	4	117	13	24	8	1	6	352	7	5	.....	697	6	1,785
United States	4	1	.....	.....	3	7	.....	13	1	1	.....	.....	.....	1	.....	.....	.....	14	.....	45
Grand total	728	190	9	49	1,774	1,741	39	3,143	131	253	42	7	230	861	115	125	23	7,240	17	16,717
Male	629	153	7	34	1,339	1,371	37	2,911	114	243	27	5	188	650	93	92	23	5,545	15	13,476
Female	99	37	2	15	435	370	2	232	17	10	15	2	42	211	22	33	.....	1,695	2	3,241

Country of last permanent residence.	China.	Japan.	India.	Turkey in Asia.	Other Asia.	Total Asia.	Africa.	Australia, Tasmania, and New Zealand.	Pacific islands, not specified.	British North America.	British Honduras.	Other Central America.	Mexico.	South America.	West Indies.	United States.	Other countries.	Grand total.	Male.	Female.
Austria-Hungary	.....	1	.....	.....	.....	1	.....	4	.....	4,445	.....	3	24	2	4	.....	1	4,988	4,052	936
Belgium	1	10	.....	.....	.....	11	.....	1	1	201	.....	13	15	1	8	.....	.....	335	269	66
Bulgaria, Servia, and Montenegro	.....	.....	.....	.....	.....	.....	.....	.....	.....	442	.....	.....	.....	.....	.....	.....	.....	447	445	2
Denmark	.....	1	.....	.....	1	2	.....	.....	.....	86	1	6	2	1	6	.....	8	138	95	43
France, including Corsica	1	20	.....	1	.....	22	.....	15	19	743	2	81	309	89	184	.....	.....	2,147	1,508	639
German Empire	8	31	.....	.....	.....	39	.....	4	13	548	6	106	145	73	69	.....	4	2,027	1,549	478
Greece	.....	.....	.....	.....	.....	.....	.....	.....	.....	383	.....	3	6	.....	4	.....	.....	406	389	17
Italy, including Sicily and Sardinia	.....	3	.....	.....	.....	3	.....	.....	.....	8,921	.....	15	197	17	32	.....	4	9,533	8,579	954
Netherlands	1	.....	.....	.....	.....	1	.....	.....	.....	109	.....	.....	3	3	6	.....	3	208	163	45
Norway	1	1	.....	.....	.....	2	.....	.....	.....	315	.....	2	4	.....	28	.....	.....	548	458	90
Portugal, including Cape Verde and Azore islands	.....	2	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	8	.....	25	69	54	15
Roumania	.....	.....	.....	.....	.....	.....	.....	.....	.....	176	.....	.....	.....	1	1	.....	.....	182	123	59
Russian Empire	.....	6	.....	.....	.....	6	.....	1	.....	3,744	.....	3	6	.....	1	.....	3	3,854	2,480	1,374
Spain, including Canary and Balearic islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	4	23	403	31	504	.....	7	1,124	860	264
Sweden	.....	.....	.....	.....	.....	.....	.....	.....	.....	274	.....	4	2	1	2	.....	1	355	266	89
Switzerland	.....	2	.....	.....	.....	2	.....	.....	.....	69	.....	14	15	3	3	.....	.....	180	128	52
Turkey in Europe	.....	.....	.....	.....	.....	.....	.....	.....	.....	472	.....	1	9	1	.....	.....	.....	488	476	12
United Kingdom	84	153	7	.....	3	247	1	218	11	11,460	41	97	348	69	375	.....	4	16,472	12,140	4,332
Other Europe	.....	.....	.....	.....	.....	.....	.....	.....	.....	131	.....	.....	2	6	6	.....	.....	155	120	35
Total Europe	96	230	7	1	4	338	1	243	44	32,545	54	371	1,490	298	1,241	.....	60	43,656	34,154	9,502

TABLE XVI.—PASSENGERS DEPARTED FROM SEAPORTS OF THE UNITED STATES FOR FOREIGN COUNTRIES OTHER THAN BRITISH NORTH AMERICA, FISCAL YEAR ENDED JUNE 30, 1907.

[In the absence of law requiring masters of vessels departing from the United States for foreign countries to deliver to collectors of customs returns of the passengers embarking on such vessels, reliance is had upon the courtesy of the agents of steamship and packet lines for information on the outward passenger movement. The following statistics relate only to the departure from the seaports indicated in the table, and comprise only the data secured in the manner above indicated, but it is probable that the departures given embrace nearly the entire passenger movement from the United States to foreign countries from our seaports.]

Line of vessels.	Port of departure and destination.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
		Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
		Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
	From Baltimore, Md.:															
Atlantic Fruit Co	Port Antonio, Jamaica	2	.....	2	25	6	31	33	.....	.....	.....	.....	.....	.....	.....	33
North German Lloyd Co	Bremen, Germany	87	83	170	615	807	1,422	1,592	157	152	309	1,960	1,090	3,050	3,359	4,951
United Fruit Co	Port Antonio, Jamaica	.....	.....	.....	51	27	78	78	.....	.....	.....	.....	.....	.....	.....	78
	Total, Baltimore, Md	89	83	172	691	840	1,531	1,703	157	152	309	1,960	1,090	3,050	3,359	5,062
	From Boston, Mass.:															
Allan	Glasgow, Scotland	35	33	68	311	492	803	871	42	26	68	135	136	271	339	1,210
Cunard	Liverpool, England	99	102	201	1,511	1,764	3,275	3,476	354	401	755	3,534	2,855	6,389	7,144	10,620
Leyland	Do	10	10	20	226	464	690	710	.....	.....	.....	.....	.....	.....	.....	710
United Fruit Co	Port Antonio, Jamaica	11	8	19	380	215	595	614	.....	.....	.....	.....	.....	.....	.....	614
	Port Limon, Costa Rica	10	6	16	97	47	144	160	.....	.....	.....	.....	.....	.....	.....	160
White Star	Liverpool, England	85	83	168	1,482	1,532	3,014	3,182	299	311	610	2,550	1,790	4,340	4,950	8,132
	Mediterranean ports	68	86	154	1,278	1,976	3,254	3,408	618	551	1,169	3,895	5,604	9,499	10,668	14,076
Sailing vessel	Buenos Aires	.....	.....	.....	2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	2
	Total, Boston, Mass	318	328	646	5,287	6,490	11,777	12,423	1,313	1,289	2,602	10,114	10,385	20,499	23,101	35,524
	From Brunswick, Ga.:															
Brunswick	Cuba	1	2	3	54	27	81	84	.....	.....	.....	2	.....	2	2	86
	From Galveston, Tex.:															
North German Lloyd Co	Bremen, Germany	54	48	102	219	252	471	573	29	34	63	392	116	508	571	1,144
Gulf transport	Liverpool, England	4	5	9	11	26	37	46	.....	.....	.....	.....	.....	.....	.....	46
Leyland	Do	1	.....	1	6	5	11	12	.....	.....	.....	.....	.....	.....	.....	12
Booth	Do	.....	4	4	2	6	8	12	.....	.....	.....	.....	.....	.....	.....	12
	Total, Galveston, Tex	59	57	116	238	289	527	643	29	34	63	392	116	508	571	1,214

Sailing vessel	From Gulfport, Miss.: Colon, Panama				2		2	2								2
	From Hawaii:															
Oceanic	Australian ports	4	6	10	54	26	80	90				2		2	2	92
Canadian and Australian	Do	1		1	36	22	58	59				16	3	19	19	78
Occidental and Oriental	Hongkong, Manila, China, and Japan.	2	2	4	12	7	19	23	73	82	155	334	107	441	596	619
Pacific Mail	Do	8	9	17	61	63	124	141	285	342	627	1,309	452	1,761	2,388	2,529
Toyo Kisen Kaisha	Do	7	5	12	33	19	52	64	236	223	459	840	316	1,156	1,615	1,679
	Total, Hawaii	22	22	44	196	137	333	377	594	647	1,241	2,501	878	3,379	4,620	4,997
	From Key West, Fla.:															
P. and O	Nassau and Habana	493	499	992	8,805	4,405	13,210	14,202								14,202
McKay	Cuba	15	10	25	110	52	162	187								187
Sailing vessels	Central America and West Indies.	14	8	22	268	125	393	415								415
	Total, Key West, Fla	522	517	1,039	9,183	4,582	13,765	14,804								14,804
	From Mobile, Ala.:															
Munson	Cuba				361	162	523	523								523
Bluefields	Bluefields, Nicaragua				1	3	4	4								4
Central American Steamship Line.	Central America				9	4	13	13								13
Camors, McConnell Co	Bocas del Toro, Panama				17	7	24	24								24
Orr and Laubenheimer Co.	Belize, British Honduras				36	14	50	50								50
United Fruit Co	Central America				35	12	47	47								47
Thackar Bros. Steamship Co.	Do				3	1	4	4								4
	Total, Mobile, Ala				462	203	665	665								665
	From New Bedford, Mass.:															
Insular Navigation Co	Azores								14	6	20	86	28	114	134	134
Sailing vessel	Cape Verde Islands	2	1	3	14	27	41	44				210		210	210	254
	Total, New Bedford, Mass.	2	1	3	14	27	41	44	14	6	20	296	28	324	344	388
	From New York, N. Y.:															
American	Southampton, England	408	155	563	3,730	3,245	6,975	7,538	974	348	1,322	8,463	3,263	11,726	13,048	20,586
Anchor	Glasgow, Scotland	458	329	787	4,668	2,068	6,736	7,523	532	456	988	6,048	2,617	8,665	9,653	17,176
	Mediterranean ports	1	1	2	85	32	117	119	290	163	453	6,403	682	7,085	7,538	7,657
Atlantic Transport Co	London, England	456	223	679	1,807	901	2,708	3,387								3,387
Booth	West Indies	55	38	93	107	79	186	279	17	17	34	86	35	121	155	434
Campania Transportation Co.	Mediterranean ports	4	6	10	45	19	64	74	81	58	139	1,027	95	1,122	1,261	1,335
Barcelona	Cadiz	2	2	4	15	16	31	35	1		1	4	3	7	8	43
	West Indies	3	6	9	20	17	37	46					1	1	1	47
	Veracruz, Mexico				5	2	7	7				2		2	2	9
Clyde	West Indies	14	11	25	324	96	420	445								445

TABLE XVI.—PASSENGERS DEPARTED FROM SEAPORTS OF THE UNITED STATES FOR FOREIGN COUNTRIES OTHER THAN BRITISH NORTH AMERICA, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

Line of vessels.	Port of departure and destination.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
		Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
		Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
	From New York, N. Y.—Con.															
Cunard	Queenstown and Liverpool.	725	405	1,130	10,298	6,738	17,036	18,166	1,426	923	2,349	10,985	6,643	17,628	19,977	38,143
	Mediterranean ports	61	66	127	1,034	1,249	2,283	2,410	599	475	1,074	8,164	4,483	12,647	13,721	16,131
Fabre	Italy	16	10	26	136	127	263	289	456	374	830	10,656	1,127	11,783	12,613	12,902
French	France	1,487	898	2,385	6,426	3,618	10,044	12,429	2,639	1,583	4,222	18,771	9,106	27,877	32,099	44,528
Hamburg-American:																
Atlas service	Central America and West Indies.	418	205	623	1,332	626	1,958	2,581								2,581
Regular and express service.	Plymouth, Cherbourg, and Hamburg.	1,790	896	2,686	14,597	6,387	20,984	23,670	3,730	1,954	5,684	17,009	7,373	24,382	30,066	53,736
	Naples and Genoa, Italy	321	165	486	1,319	883	2,202	2,688	478	266	744	3,708	1,770	5,478	6,222	8,910
Holland-American	Rotterdam, Netherlands	387	459	846	3,313	3,868	7,181	8,027	799	935	1,734	10,213	4,751	14,964	16,698	24,725
Italian	Mediterranean ports	52	48	100	546	259	805	905	282	315	597	6,570	558	7,128	7,725	8,630
	Bombay, India												2	2	2	2
	Alexandria, Egypt									1	1	5		5	6	6
Lamport & Holt	South American	30	29	59	380	141	521	580	56	52	108	391	147	538	646	1,226
La Veloce	South American and Mediterranean.	211	155	366	67	40	107	473	2,194	555	2,749	2,876	407	3,283	6,032	6,505
Munson	West Indies	34	81	115	402	223	625	740	4	4	8	34	6	40	48	788
North German Lloyd	Bremen, Germany	1,587	634	2,221	15,339	6,380	21,719	23,940	3,114	2,231	5,345	22,917	10,090	33,007	38,352	62,292
	Genoa and Naples, Italy	277	179	456	4,308	1,534	5,842	6,298	739	399	1,138	9,431	4,009	13,440	14,578	20,876
New York and Cuba Mail	Mexico and Cuba	73	43	116	2,136	441	2,577	2,693	37	25	62	707	152	859	921	3,614
New York and Porto Rico	Porto Rico	111	88	199	1,385	930	2,315	2,514	6	4	10	150	37	187	197	2,711
Panama Railroad	Colon, West Indies, etc.	217	235	452	4,437	1,198	5,635	6,087	5	4	9	411	40	451	460	6,547
Quebec	Bermuda and West Indies.	105	100	205	2,757	2,534	5,291	5,496	48	39	87	364	401	765	852	6,348
Red D	San Juan, P. R.	32	32	64	636	281	917	981								981
	Curaçao, Dutch West Indies.	3	2	5	56	27	83	88								88
	Venezuela	10	10	20	157	64	221	241								241
Red Star	Antwerp, Belgium	626	239	865	5,095	1,911	7,006	7,871	1,850	685	2,535	14,205	5,565	19,770	22,305	30,176
Royal Dutch West Indian Mail.	West Indies and South America.	7	8	15	96	34	130	145								145

Sailing vessel	From Gulfport, Miss.: Colon, Panama				2		2	2								2
	From Hawaii:															
Oceanic	Australian ports	4	6	10	54	26	80	90				2		2	2	92
Canadian and Australian	Do	1		1	36	22	58	59				16	3	19	19	78
Occidental and Oriental	Hongkong, Manila, China, and Japan.	2	2	4	12	7	19	23	73	82	155	334	107	441	596	619
Pacific Mail	Do	8	9	17	61	63	124	141	285	342	627	1,309	452	1,761	2,388	2,529
Toyo Kisen Kaisha	Do	7	5	12	33	19	52	64	236	223	459	840	316	1,156	1,615	1,679
	Total, Hawaii	22	22	44	196	137	333	377	594	647	1,241	2,501	878	3,379	4,620	4,997
	From Key West, Fla.:															
P. and O	Nassau and Habana	493	499	992	8,805	4,405	13,210	14,202								14,202
McKay	Cuba	15	10	25	110	52	162	187								187
Sailing vessels	Central America and West Indies.	14	8	22	268	125	393	415								415
	Total, Key West, Fla	522	517	1,039	9,183	4,582	13,765	14,804								14,804
	From Mobile, Ala.:															
Munson	Cuba				361	162	523	523								523
Bluefields	Bluefields, Nicaragua				1	3	4	4								4
Central American Steamship Line.	Central America				9	4	13	13								13
Camors, McConnell Co	Bocas del Toro, Panama				17	7	24	24								24
Orr and Laubenheimer Co.	Belize, British Honduras				36	14	50	50								50
United Fruit Co	Central America				35	12	47	47								47
Thackar Bros. Steamship Co.	Do				3	1	4	4								4
	Total, Mobile, Ala				462	203	665	665								665
	From New Bedford, Mass.:															
Insular Navigation Co	Azores								14	6	20	86	28	114	134	134
Sailing vessel	Cape Verde Islands	2	1	3	14	27	41	44				210		210	210	254
	Total, New Bedford, Mass.	2	1	3	14	27	41	44	14	6	20	296	28	324	344	388
	From New York, N. Y.:															
American	Southampton, England	408	155	563	3,730	3,245	6,975	7,538	974	348	1,322	8,463	3,263	11,726	13,048	20,586
Anchor	Glasgow, Scotland	458	329	787	4,668	2,068	6,736	7,523	532	456	988	6,048	2,617	8,665	9,653	17,176
	Mediterranean ports	1	1	2	85	32	117	119	290	163	453	6,403	682	7,085	7,538	7,657
Atlantic Transport Co	London, England	456	223	679	1,807	901	2,708	3,387								3,387
Booth	West Indies	55	38	93	107	79	186	279	17	17	34	86	35	121	155	434
Campania Transportation Co.	Mediterranean ports	4	6	10	45	19	64	74	81	58	139	1,027	95	1,122	1,261	1,335
Barcelona	Cadiz	2	2	4	15	16	31	35	1		1	4	3	7	8	43
	West Indies	3	6	9	20	17	37	46					1	1	1	47
	Veracruz, Mexico				5	2	7	7				2		2	2	9
Clyde	West Indies	14	11	25	324	96	420	445								445

TABLE XVI.—PASSENGERS DEPARTED FROM SEAPORTS OF THE UNITED STATES FOR FOREIGN COUNTRIES OTHER THAN BRITISH NORTH AMERICA, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

Line of vessels.	Port of departure and destination.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
		Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
		Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
	From Porto Rico—Cont'd:															
La Veloce	Mediterranean ports	16	17	33	203	88	291	324	43	44	87	277	152	429	516	840
Vapores Española	Cuba	9	5	14	30	19	49	63				9	1	10	10	73
Oteri	West Indies											191		191	191	191
Sailing vessel	Do	1		1	7	1	8	9	4		4	32	2	34	38	47
	Total, Porto Rico	112	104	216	1,171	508	1,679	1,895	236	201	437	1,663	672	2,335	2,772	4,667
	From Portland, Me.:															
Dominion Line	Liverpool, England				80	48	128	128	28	29	57	422	239	661	718	846
Sailing vessel	Brava, Cape Verde Islands.								3	2	5	48	8	56	61	61
	Total, Portland, Me				80	48	128	128	31	31	62	470	247	717	779	907
	From Puget Sound, Wash.:															
Boston	Hamburg, Manila, China, Vladivostok, and Japan.	7	2	9	78	89	167	176		1	1	109	7	116	117	293
Nippon Yusen Kaisha	Hongkong, Manila, China, Vladivostok, and Japan.				222	75	297	297	1	2	3	1,025	55	1,080	1,083	1,380
Great Northern	Hongkong, Manila, China, and Japan.	2	10	12	347	377	724	736				349	26	375	375	1,111
Oceanic	Hongkong and Japan											239	2	241	241	241
Liverpool Steamship Line.	Do											67	5	72	72	72
	Total, Puget Sound, Wash.	9	12	21	647	541	1,188	1,209	1	3	4	1,789	95	1,884	1,888	3,097
	From San Francisco, Cal.:															
Oceanic	Auckland, Sydney, and Society Islands.	31	27	58	548	336	884	942				149	5	154	154	1,096
Occidental and Oriental	Hongkong, China, and Japan.				233	111	344	344				339	4	343	343	687
	China (Chinese)											871		871	871	871
Oriental	Hongkong, Shanghai, and Japan.	5	4	9	274	164	438	447				1,179	35	1,214	1,214	1,661
	China (Chinese)											1,255		1,255	1,255	1,255

Royal Mail Steam Packet	Cherbourg and Southampton, England.	2	2	4	24	5	29	33								33
	West Indies and South America.	45	61	106	1,239	706	1,945	2,051				63		63	63	2,114
Scandinavian-American	Denmark	150	149	299	776	950	1,726	2,025	203	234	437	1,186	719	1,905	2,342	4,367
	Norway	109	117	226	491	591	1,082	1,308	319	328	647	2,426	1,285	3,711	4,358	5,666
	Sweden	1	1	2	4	20	24	26	269	240	509	893	871	1,764	2,273	2,299
Spanish Steamship Co.	Mediterranean ports	11	8	19	88	45	133	152	93	86	179	2,203	145	2,348	2,527	2,679
	West Indian ports	10	12	22	167	53	220	242				2		2	2	244
Trinidad	Do	10	9	19	161	78	239	258								258
Ward	West Indies and Mexico	600	396	996	4,104	1,601	5,705	6,701	277	169	446	1,583	489	2,072	2,518	9,219
White Star	Liverpool, England	534	343	877	9,306	4,012	13,318	14,195	1,139	445	1,584	10,636	3,293	13,929	15,513	29,708
	Naples, Italy	110	73	183	2,650	820	3,470	3,653	317	158	475	6,434	3,200	9,634	10,109	13,762
Wilson	Hull, England	5	5	10	17	55	72	82								82
	Total, New York, N. Y.	11,568	6,934	18,502	106,085	54,904	160,989	179,491	22,974	13,526	36,500	185,026	73,365	258,391	294,891	474,382
	From New Orleans, La.:															
Bluefields	Bluefields, Nicaragua	7		7	70	38	108	115								115
Celfalu Bros	Puerto Cortez, Honduras				3		3	3								3
Independent	Ceiba, Honduras	3	6	9	126	30	156	165								165
Leyland	London, Liverpool, and Havre.	3	6	9	44	52	96	105								105
Morgan	Cuba	51	41	92	1,212	556	1,768	1,860								1,860
United Fruit Co.	Central America	41	45	86	966	285	1,251	1,337	3	1	4	72		72	76	1,413
Texas Transportation and Terminal Co.	Havre, France				3	3	6	6	2	1	3	16	5	21	24	30
	Palermo, Italy	10	7	17	67	15	82	99	69	60	129	346	95	441	570	669
Planters	Central America				10		10	10								10
	Total, New Orleans, La.	115	105	220	2,501	979	3,480	3,700	74	62	136	434	100	534	670	4,370
	From Philadelphia, Pa.:															
American	Liverpool, England	80	69	149	972	1,654	2,626	2,775	281	252	533	2,658	1,006	3,664	4,197	6,972
Allen	Glasgow, Scotland				41	23	64	64								64
	St. Johns, Newfoundland				34	6	40	40					1	1	1	41
Atlantic Fruit Co.	West Indies				3	1	4	4								4
Red Star	Antwerp, Belgium	25	28	53	271	557	828	881								881
United Fruit Co.	West Indies	5	7	12	275	199	474	486								486
Masilo	Genoa				3		3	3								3
	Total, Philadelphia, Pa.	110	104	214	1,599	2,440	4,039	4,253	281	252	533	2,658	1,007	3,665	4,198	8,451
	From Porto Rico:															
Compañía Transatlántica Española.	Mediterranean ports and West Indies.	39	37	76	381	173	554	630	16	11	27	190	55	245	272	902
Compagnie Générale Transatlantique.	France and West Indies	22	16	38	193	82	275	313	122	99	221	484	260	744	965	1,278
Red D	West Indies and South America.	5	6	11	123	29	152	163	6	5	11	80	25	105	116	279
Empresa de Vapores	West Indies	14	18	32	166	93	259	291	39	38	77	337	156	493	570	861
Hamburg-American	Do	6	5	11	68	23	91	102	6	4	10	63	21	84	94	196

TABLE XVI.—PASSENGERS DEPARTED FROM SEAPORTS OF THE UNITED STATES FOR FOREIGN COUNTRIES OTHER THAN BRITISH NORTH AMERICA, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

Line of vessels.	Port of departure and destination.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
		Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
		Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
	From Porto Rico—Cont'd:															
La Veloce	Mediterranean ports	16	17	33	203	88	291	324	43	44	87	277	152	429	516	840
Vapores Española	Cuba	9	5	14	30	19	49	63				9	1	10	10	73
Oteri	West Indies											191		191	191	191
Sailing vessel	Do	1		1	7	1	8	9	4		4	32	2	34	38	47
	Total, Porto Rico	112	104	216	1,171	508	1,679	1,895	236	201	437	1,668	672	2,335	2,772	4,667
	From Portland, Me.:															
Dominion Line	Liverpool, England				80	48	128	128	28	29	57	422	239	661	718	846
Sailing vessel	Brava, Cape Verde Islands.								3	2	5	48	8	56	61	61
	Total, Portland, Me				80	48	128	128	31	31	62	470	247	717	779	907
	From Puget Sound, Wash.:															
Boston	Hamburg, Manila, China, Vladivostok, and Japan.	7	2	9	78	89	167	176		1	1	109	7	116	117	293
Nippon Yusen Kaisha	Hongkong, Manila, China, Vladivostok, and Japan.				222	75	297	297	1	2	3	1,025	55	1,080	1,083	1,380
Great Northern	Hongkong, Manila, China, and Japan.	2	10	12	347	377	724	736				349	26	375	375	1,111
Oceanic	Hongkong and Japan											239	2	241	241	241
Liverpool Steamship Line.	Do											67	5	72	72	72
	Total, Puget Sound, Wash.	9	12	21	647	541	1,188	1,209	1	3	4	1,789	95	1,884	1,888	3,097
	From San Francisco, Cal.:															
Oceanic	Auckland, Sydney, and Society Islands.	31	27	58	548	336	884	942				149	5	154	154	1,096
Occidental and Oriental	Hongkong, China, and Japan.				233	111	344	344				339	4	343	343	687
	China (Chinese)											871		871	871	871
Oriental	Hongkong, Shanghai, and Japan	5	4	9	274	164	438	447				1,179	35	1,214	1,214	1,661
	China (Chinese)											1,255		1,255	1,255	1,255

	Central and South America				268	89	357	357				108	16	124	124	481
	Total, San Francisco, Cal.	81	67	148	2,055	1,248	3,303	3,451				7,632	85	7,717	7,717	11,168
	From Tampa, Fla.:															
McKay	Cuba				1	2	3	3								3
Cuban	Do				10	8	18	18				60	17	77	77	95
	Total, Tampa, Fla				11	10	21	21				60	17	77	77	98
	Grand total	13,008	8,336	21,344	130,276	73,273	203,549	224,893	25,704	16,203	41,907	214,997	88,085	303,082	344,989	569,882

RECAPITULATION.

Classification.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
	Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
	Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
PORT OF DEPARTURE.															
Baltimore, Md	89	83	172	691	840	1,531	1,703	157	152	309	1,960	1,090	3,050	3,359	5,062
Boston, Mass	318	328	646	5,287	6,490	11,777	12,423	1,313	1,289	2,602	10,114	10,385	20,499	23,101	35,524
Brunswick, Ga	1	2	3	54	27	81	84				2		2	2	86
Galveston, Tex	59	57	116	238	289	527	643	29	34	63	392	116	508	571	1,214
Gulfport, Miss				2		2	2								2
Hawaii	22	22	44	196	137	333	377	594	647	1,241	2,501	878	3,379	4,620	4,997
Key West, Fla	522	517	1,039	9,183	4,582	13,765	14,804								14,804
Mobile, Ala				462	203	665	665								665
New Bedford, Mass	2	1	3	14	27	41	44	14	6	20	296	28	324	344	388
New York, N. Y	11,568	6,934	18,502	106,085	54,904	160,989	179,491	22,974	13,526	36,560	185,026	73,365	258,391	294,891	474,382
New Orleans, La	115	105	220	2,501	979	3,480	3,700	74	62	136	434	100	534	670	4,370
Philadelphia, Pa	110	104	214	1,599	2,440	4,039	4,253	281	252	533	2,658	1,007	3,665	4,198	8,451
Porto Rico	112	104	216	1,171	508	1,679	1,895	236	201	437	1,663	672	2,335	2,772	4,667
Portland, Me				80	48	128	128	28	29	57	422	239	661	718	846

TABLE XVI.—PASSENGERS DEPARTED FROM SEAPORTS OF THE UNITED STATES FOR FOREIGN COUNTRIES OTHER THAN BRITISH NORTH AMERICA, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

RECAPITULATION—Continued.

Classification.	Cabin passengers.							Passengers other than cabin.							Total passengers departed.
	Under 12 years of age.			12 years of age and over.			Total cabin.	Under 12 years of age.			12 years of age and over.			Total other than cabin.	
	Males.	Females.	Total.	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.		
PORT OF DEPARTURE—continued.															
Providence, R. I.								3	2	5	48	8	56	61	61
Puget Sound, Wash.	9	12	21	647	541	1,188	1,209	1	3	4	1,789	95	1,884	1,888	3,097
San Francisco, Cal.	81	67	148	2,055	1,248	3,303	3,451				7,632	85	7,717	7,717	11,168
Tampa, Fla.				11	10	21	21				60	17	77	77	98
Shipped by—															
Steamers	12,991	8,327	21,318	129,983	73,120	203,103	224,421	25,697	16,201	41,898	214,707	88,075	302,782	344,680	569,101
Sailing vessels	17	9	26	293	153	446	472	7	2	9	290	10	300	309	781
Chinese departed											5,081		5,081	5,081	5,081
TOTAL PASSENGERS DEPARTED.															
1890	5,297	4,099	9,396	66,120	30,359	96,489	105,885	8,698	7,532	16,230	83,110	32,914	116,024	132,254	238,139
1891	5,604	3,756	9,360	65,056	32,692	97,748	107,108	9,268	6,004	15,272	89,034	35,092	124,126	139,398	246,506
1892	5,717	3,706	9,423	61,763	33,966	95,729	105,152	9,999	5,969	15,968	96,834	38,602	135,436	151,404	256,556
1893	5,503	3,727	9,230	57,904	27,995	85,899	95,129	8,352	5,444	13,796	88,315	33,384	121,699	135,495	230,664
1894	7,622	4,834	12,456	70,864	38,611	109,475	121,931	15,798	9,307	25,105	112,941	52,794	165,735	190,840	312,771
1895	5,828	3,812	9,640	64,887	38,366	103,253	112,893	17,257	10,612	27,869	123,845	64,951	188,796	216,665	329,558
1898 [a]	5,111	3,780	8,891	54,533	31,130	85,663	94,554	10,001	5,789	15,790	78,621	36,446	115,067	130,857	225,411
1899	6,418	4,624	11,042	76,106	41,099	117,205	128,247*	8,836	6,447	15,283	78,061	34,417	112,478	127,761	256,008
1900	10,315	7,443	17,758	87,041	51,096	138,137	155,895	13,906	9,095	23,001	78,230	36,268	114,498	137,499	293,404
1901	7,646	6,326	13,972	84,853	49,739	134,592	148,564	10,968	8,042	19,010	96,797	42,353	139,150	158,160	306,724
1902	7,757	5,277	13,034	91,308	53,770	145,078	158,112	12,067	8,256	20,323	99,966	48,359	148,325	168,648	326,760
1903	6,965	4,994	11,959	99,432	57,293	156,725	168,684	13,395	9,082	22,477	132,894	51,206	184,100	206,577	375,261
1904	8,235	6,112	14,347	109,469	60,797	170,266	184,613	18,249	13,086	31,335	209,191	83,065	292,256	323,591	508,204
1905	8,544	6,231	14,775	119,287	67,146	186,433	201,208	22,104	15,335	37,439	210,270	87,234	297,504	334,943	536,151
1906	8,798	6,060	14,858	125,340	74,471	199,811	214,669	16,591	11,144	27,735	179,869	74,464	254,333	282,068	496,737
1907	13,008	8,336	21,344	130,276	73,273	203,549	224,893	25,704	16,203	41,907	214,997	88,085	303,082	344,989	569,882

[a] For 1896 and 1897 no figures are available.

In the enforcement of the immigration and Chinese-exclusion laws no more embarrassing question is presented than that of handling seamen so as to prevent evasions of those laws and at the same time not interfere with the commercial and shipping interests of the country. From its experience of another year the Bureau is more convinced than ever that the guise of a seaman is frequently employed to effect the entry into this country of aliens who are ineligible by reason of disease or some other cause. The Bureau is disappointed that no provision was inserted in the new law to cover this matter, for it had hoped the recommendation contained in its report for 1905 (p. 77) and reiterated in its last report (p. 57) might be adopted. In the absence of any specific and direct provision of law it is a task of magnitude to attempt to handle successfully this delicate subject, but it is imperative that the opportunity for violation of the law in this connection shall be guarded. The extent of the opportunity is demonstrated by the number of alien seamen who have deserted from vessels arriving at ports of this country during the fiscal year 1907, as shown by Table XVI A, aggregating 9,616. Undoubtedly a vast majority of these were bona fide seamen, regularly and permanently enlisted in that calling, and concerning whom, therefore, it is reasonable to assume that after deserting one vessel they reshipped on another and left the country. How many of the said number were bona fide seamen who reshipped is not known, and therefore the exact extent to which violations of the immigration laws have thus occurred can not be stated. But the Bureau is certain, from its experience with this matter, that the violations are considerable. In preparing regulations under the new immigration law a rule which has been in force for several years has been readopted with certain modifications. (See Rule 22, "Immigration Laws and Regulations of July 1, 1907.") Every effort will be made in the future, as in the past, to enforce this regulation, which seems the best that can be adopted in the present state of the law. But it is a makeshift at the most, and there should be some direct authority given by statute to enable the officers of this service successfully to cope with the situation.

The related subject of the Chinese seaman is covered by subtitle 11 of Title II of this report. New, and it is feared even more serious, difficulties are being encountered already in the efforts to enforce the last proviso to section 1 of the immigration act of February 20, 1907 (which proviso was made effective by the President's proclamation of March 14), for it is found that the Japanese laborer of Hawaii is quick to seize upon so ready a plan as enlistment as a seaman to enable him to enter the mainland territory, despite the desire of both his own and the United States Governments to have him remain in the district to which his passport was limited.

TABLE XVI A.—DESERTING ALIEN SEAMEN, FISCAL YEAR ENDED JUNE 30, 1907, BY PORTS.

New York, N. Y.	493	Mobile, Ala.	439
Boston, Mass.	398	New Orleans, La.	1,090
Baltimore, Md.	15	New Bedford, Mass.	6
Philadelphia, Pa.	1,806	Norfolk, Va.	275
San Francisco, Cal.	1,435	Pascagoula, Miss.	10
San Juan, P. R.	4	Pensacola, Fla.	424
Brunswick, Ga.	58	Portland, Me.	33
Charleston, S. C.	22	Portland, Oreg.	484
Eureka, Cal.	13	San Diego, Cal.	75
Fernandina, Fla.	19	Savanpah, Ga.	241
Galveston, Tex.	416	Seattle, Wash.	785
Gulfport, Miss.	641	Tampa, Fla.	41
Honolulu, Hawaii	175	Wilmington, N. C.	47
Jacksonville, Fla.	22		
Key West, Fla.	1	Total	9,616
Los Angeles, Cal.	148		

Tables XVII and XVIII relate to appeals taken by aliens rejected by boards of special inquiry at the ports and show action thereon by the Department, the data being arranged in the first by ports and in the second by causes of rejection. It will be noted that there has been a considerable increase in the number of appeals taken to the Department.

TABLE XVII.—APPEALS FROM DECISIONS UNDER IMMIGRATION LAWS, AND ALIENS ADMITTED ON BOND, FISCAL YEAR ENDED JUNE 30, 1907, BY PORTS.

APPEALS FROM EXCLUDING DECISIONS.

Action taken.	New York, N. Y.	Boston, Mass.	Philadelphia, Pa.	Baltimore, Md.	Montreal, Canada.	San Francisco, Cal.	San Juan, P. R.	Galveston, Tex.	Honolulu, Hawaii.	Mexican border.	New Bedford, Mass.	New Orleans, La.	Portland, Oreg.	Seattle, Wash.	Tampa, Fla.	Total.
Pending at close of previous year	101	6	....	....	....	....	....	....	....	3	....	....	....	....	....	110
Appealed	3,491	477	41	37	174	5	4	5	9	77	6	21	1	17	11	4,376
Total	3,592	483	41	37	174	5	4	5	9	80	6	21	1	17	11	4,486
Disposition on appeal:																
Admitted without bond	1,610	181	15	12	98	1	2	2	2	9	....	7	1	2	8	1,950
Admitted on bond	345	36	18	4	3	....	....	1	1	....	....	4	....	....	....	412
Debarred	1,480	245	8	20	73	4	2	2	5	68	6	10	....	13	3	1,939
Withdrawn or otherwise disposed of by means other than departmental decision	80	1	....	....	....	....	....	....	....	....	....	....	....	2	....	83
Pending at close of current year	77	20	....	1	....	....	....	....	1	3	....	....	....	....	....	102

APPEALS FROM ADMITTING DECISIONS.

Pending at close of previous year	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1
Appealed	10	....	1	....	37	....	1	....	1	19	1	....	....	....	....	70
Total	10	....	1	....	38	....	1	....	1	19	1	....	....	....	....	71
Disposition on appeal:																
Admitted without bond	9	....	1	....	38	....	1	....	....	15	1	....	....	....	....	65
Admitted on bond	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1
Debarred	1	....	....	....	....	....	....	....	....	4	....	....	....	....	....	5

ADMITTED ON BOND WITHOUT APPEAL.

Admitted	....	6	....	....	....	....	....	....	....	....	....	....	....	....	....	6

TABLE XVIII.—APPEALS FROM DECISIONS UNDER IMMIGRATION LAWS, AND ALIENS ADMITTED ON BOND, FISCAL YEAR ENDED JUNE 30, 1907, BY CAUSES.

APPEALS FROM EXCLUDING DECISIONS.

Action taken.	Idiots.	Insane persons.[a]	Paupers or likely to become public charges.[b]	Loathsome or dangerous contagious diseases.	Convicts.	Polygamists.	Anarchists.	Without passport.	Accompanying aliens.	Contract laborers.	Total.
Pending at close of previous year	....	....	97	.....	2	....	....	....	8	3	110
Appealed	3	2	3,690	14	43	2	1	26	49	546	4,376
Total	3	2	3,787	14	45	2	1	26	57	549	4,486
Disposition on appeal:											
Admitted without bond	....	....	1,753	5	9	....	1	1	28	153	1,950
Admitted on bond	....	....	412	.....	....	....	....	....	....	....	412
Debarred during current year	3	1	1,489	9	34	2	....	22	25	354	1,939
Withdrawn or otherwise finally disposed of by means other than departmental decision	....	....	77	.....	1	....	....	....	3	2	83
Pending at close of current year	....	1	56	.....	1	....	....	3	1	40	102

APPEALS FROM ADMITTING DECISIONS.

Pending at close of previous year	....	....	1	.....	....	....	....	....	....	....	1
Appealed	....	....	56	1	....	....	....	1	....	12	70
Total	....	....	57	1	....	....	....	1	....	12	71
Disposition on appeal:											
Admitted without bond	....	....	54	.....	....	....	....	1	....	10	65
Admitted on bond	....	....	1	.....	....	....	....	....	....	....	1
Debarred during current year	....	....	2	1	....	....	....	....	....	2	5

ADMITTED ON BOND WITHOUT APPEAL 6

[a] Includes those who have been insane within five years, those who have had two attacks of insanity, and epileptics.
[b] Includes professional beggars.

Chart 1 shows the yearly immigration from the principal countries from 1820 to the present year. The proportions from each country during the entire period are as follows: United Kingdom, 30 per cent; Germany, 21 per cent; Scandinavia (Denmark, Norway, and Sweden), 7 per cent; Italy, 10 per cent; Austria-Hungary, 10 per cent; Russia, 8 per cent; France, 2 per cent; Switzerland, 1 per cent; countries not specified, 9 per cent.

It is estimated that about 47 per cent of our population is due to immigration since colonial times. The nationalities shown in chart would, therefore, practically represent the origins of 47 per cent of the population. It will be seen by reference to chart, however, that until very recent times immigration was almost entirely from the Teutonic and Keltic countries of northern and western Europe, principally Germany and the United Kingdom. Previous to 1820, although no immigration statistics were collected, it is known that the people who came to this country during colonial times and after were also from northern and western Europe. Thus the great mass of our population is of Teutonic and Keltic origin, with a considerably greater proportion of the former. A change in the source of immigration, it will be seen, however, commenced about 1882 and has assumed enormous proportions during the past eight years, until

now 76 per cent of our immigration comes from the Slavic and Iberic countries of southern and eastern Europe, more than 970,000 having arrived from those countries during the past year.

Chart 2 shows the wave of immigration into the United States from the various countries since 1820. It is interesting to note the successive periodical increases, receding less each time, coincident with periods of financial depression, only to reach a greater height with the next ascending wave, and passing a million and a quarter, the highest point in history, during the past year. Thus the three periods of depression following 1857, 1873, and 1893 stand out prominently. This periodical rise and fall well represent the relative prosperity of the country, while the gradual average increase from decade to decade may be taken as an index of the country's development and growth and its capacity to employ larger quantities of the alien element.

What will be the effect if the present phenomenal immigration continues is a question that is constantly being asked. With regard more particularly to quantity the question may be answered by the following illustration: China proper is the thickly populated portion of the Chinese Empire and is the country popularly thought of as representing the limit of density of population. With a net increase to our population by immigration of 1,000,000 per annum, which is less than the present rate, and the present rate of natural increase (14.66 per cent per decade), the United States would reach the density of China proper in about four generations, or, more particularly, in one hundred and thirty-four years, at which time we would have a population of 950,000,000. This is in no sense an estimate of future population; it is simply an illustration of the present pace.

2. Sources of and Inducements to Immigration.

The figures given in the tables covering the immigration of the past year do not necessitate any particular modification of what was said under this heading in the report for 1906 (pp. 59–61). Another year's experience but emphasizes and confirms the conviction that a considerable part of the large immigration of the past few years is forced or artificial. Two separate and distinct factors are, from interested motives, responsible for such of the immigration as is not natural: First, the violators and evaders of the contract-labor feature of the law (treated of particularly under subtitle 5 hereof, p. 141); and second, the steamship runners and agents, to a discussion of whose activities and operations considerable space was devoted in the last report of the Bureau (p. 60) and in the report for 1905 (pp. 48–57). An influence which perhaps has not heretofore been accorded the recognition to which its importance entitles it is the "letter to the home folks" written by the alien temporarily or permanently domiciled here. These letters constitute the most extensive method of advertising that can be imagined; almost innumerable "endless chains" are thus daily being forged link by link. A letter is written to his brother, father, or other relative by an alien who, after a few months' employment here, has been able to save $150 or $200—a small fortune in the eyes of the Italian or Hungarian peasant—picturing in homely but glowing terms the opportunities of this country for money making. That letter is read by or to every inhabitant of the village, or perhaps even passed on to other neighboring hamlets.

Others are thus induced to migrate—selling their belongings, mortgaging their property, almost enslaving themselves to procure the amount of the passage. They come, find employment at what seems to them fabulous wages, write letters home; and so the process goes on and on, until some of the rural districts of such countries as Italy and Hungary are almost depopulated.

Now Greece and Turkey are becoming involved in the same influences, and even the fastnesses of the mountainous districts of Bulgaria, Servia, and Montenegro are beginning to respond; all of which is exemplified by the figures of Table II (p. 80), showing increases in immigration from those countries during the past year—Italy sending 12,611, Austria-Hungary 73,314, Greece 17,091, Turkey (European and Asiatic) 12,956, and Bulgaria, Servia, and Montenegro (combined) 6,693 more than in 1906. This is an influence with which it is difficult, if not impossible, to reckon. That it is a telling, if not the most important, factor in the production of immigration there can be no doubt. The worst of it is that there are evidences that this endless chain letter scheme is seized upon by the promoters and money lenders to further their interests, and no opportunity lost to encourage both the writing and the extensive dissemination of such missives. When this is done the line is passed between natural and forced immigration, and the machinations of the promoter and usurer become a menace to the alien directly and to the welfare of this country incidentally. This furnishes a problem that can be solved by no country standing alone and is but one of the many arguments that can be advanced in favor of the Bureau's several times repeated recommendation for the holding of an international conference on immigration and emigration.

Section 39 of the new law makes provision for the calling of such a conference. The Bureau believes the time is now opportune for taking that step. There has never been a period when all the principal countries of the world were so deeply interested in the subject. Several of the leading European countries have recently either passed or introduced in their legislatures immigration laws, some of which are modeled practically after our own. The attention of the entire world has been arrested by the enormous influence the United States is exercising upon the minds of people of other countries, exemplified by the manner in which they are crowding to our shores, drawn by our institutions and the unprecedented prosperity we are enjoying. Some of the governments are taking notice with the idea of adopting measures to discourage the migration of their citizens or to induce their return; others are solicitous lest their subjects should forget their allegiance; and altogether there should be no difficulty in appealing to this awakened general interest with the object of accomplishing some international arrangement and understanding that will work for the general good. All that was said regarding this matter in its reports for 1905 and 1906 (pp. 78 and 61, respectively), the Bureau desires now to especially emphasize. Various subjects of much less importance, and ultilitarian in character, have been successfully handled by world conventions. This is a subject of the first magnitude and one which affects the future social and political well-being of all of the countries concerned. The day of the accomplishment of great things by mutual concession and compromise on the part of the world powers is upon us. Let all the countries avail themselves

of an opportunity to adjust this matter of emigration and immigration on a world basis by means of conference and negotiation before its trend of to-day has proceeded so far as to constitute a present instead of anticipated menace to the welfare of all involved.

3. Physical and Mental Condition of Aliens.

In this respect the new immigration law, becoming effective with the next fiscal year, marks an advance in legislation that is especially gratifying to the Bureau, containing as it does amendments and changes in the law that have been urged for several years past. The experience of the past twelve months has demonstrated the necessity for drawing the lines closer and holding the transportation companies to a more strict accountability for any and all derelictions in furnishing transportation to aliens mentally or physically diseased. The comparative statement given in subtitle 1, in discussing Table III, shows a marked increase in the numbers of aliens mentally or physically afflicted. To repeat all or even a part of what the Bureau has heretofore said in its reports regarding the evils attendant upon the bringing to our ports of the mentally and physically defective, particularly those afflicted with loathsome or dangerous contagious diseases, would be a work of supererogation. Adding to the class on account of the bringing of which the transportation companies shall be fined will accomplish much good. If the amount of the fine were increased to a sum sufficient to make the exercise of great care a measure of economy on the part of the transportation companies, the purposes of the law would be furthered materially. That the best use possible has been made by the Bureau of the fining provision at its disposal is evidenced by the fact that fines aggregating $37,200 have been imposed (under sec. 9 of the immigration act) during the year. Section 22 of the new act makes possible, so far as the Department is concerned, accomplishment of what the Bureau has always regarded as the ideal method of controlling the question of migration of mentally or physically diseased aliens, viz, the detail abroad of surgeons of the United States Public Health and Marine-Hospital Service to examine all those embarking for American ports. Particular attention is called to the remarks on this subject contained in the report for 1906 (p. 63).

The exclusion from this country of the morally, mentally, and physically deficient is the principal object to be accomplished by the immigration laws. The ascertainment of moral defects is a matter of extreme difficulty and must be accomplished to the best extent possible by such varying means as are found available in connection with the examination of the applicants. It ought to be possible, however, to detect and turn back at our ports a much larger percentage of the mentally and physically affected aliens than is actually deported under the existing system of examination. Referring to Table III A, it will be seen that during the past fiscal year 717 aliens were ordered deported by the Department on the ground that they had within three years after landing become public charges from causes existing prior to admission, of which number 360 were afflicted with insanity, 28 with other mental defects, and 84 with loathsome or dangerous contagious diseases. While it doubtless would have been impossible in some of these cases, even with the

most detailed and thoroughgoing medical inspection and observation for a reasonable period of time, to detect the mental or physical defect, there can be no question but that the failure to turn these persons back at the port of application was due in a majority of the cases to the fact that there is not under the existing system of examination a sufficient time allowed to permit of an observation and inspection that could be regarded as thorough and satisfactory. The Bureau suggests the wisdom of perfecting an arrangement by which a sufficient corps of Public Health and Marine-Hospital surgeons, qualified by training and experience as experts in both mental and physical diseases, may be detailed for duty in the immigration service and assigned to the principal vessels engaged in bringing immigrants to this country. Such surgeons should have no fixed assignment, but should be under the control of the surgeons in charge at the principal ports of entry for detail from time to time on the principal vessels, with instructions to carefully observe the alien passengers while en route to the United States, making notes of their observations and reporting to the surgeon in charge upon arrival. This would make possible an observation extending over a period of from five to ten days and ought to result in the detection of a large percentage of the cases of disease and mental affliction. The expense incident to such an arrangement should be borne by the Government, so that the detailed officers would be wholly independent of the transportation companies. Such surgeons could also observe the conditions existing on vessels by which aliens are deported, and their presence on board while the vessel is proceeding in both directions could not but have an important effect upon the treatment accorded the steerage passengers. A further important result would doubtless be a tendency upon the part of the steamship officials to supplement and increase the efficiency of the medical examinations conducted abroad in the cases of prospective passengers.

A subject closely related to the foregoing is the importation of women and girls for immoral purposes. This was among the first of the immigration evils to engage the attention of Congress, a section of the act of 1875 being devoted thereto. Its importance has increased in due proportion to the growth of immigration itself, and no small part of the duties of the service has consisted in trying to prevent the importation and to effect the deportation of such persons and their procurers. There can be no denying the assertion that apparently, and on the surface at least, there has been in recent years a marked decrease in this nefarious business, so appropriately termed the "white-slave traffic." Reports reach the Bureau from all quarters, foreign and domestic, indicating that the combined efforts of those abroad and in this country interested in wiping out the disgraceful blot upon our Christian civilization have accomplished considerable. But the Bureau is satisfied, from the experience of its field officers, that much still remains to be done. The number of foreign prostitutes and procurers or importers of prostitutes being detected and deported (see Table III A, p. 86) furnishes incontrovertible evidence on this point. Some especially good work has been done in several of the Western States, notably Montana. In this respect, also, the new immigration act (secs. 2 and 3) is a decided improvement over the old, and places in the hands of the Bureau a weapon with which it hopes to make an energetic and effective fight.

The Bureau believes that this provision for the cure of existing evils should be supplemented by a preventive measure which it here suggests: A number of thoroughly qualified women, equipped with a sufficient knowledge of foreign languages, should be selected and appointed for service on the vessels of several of the larger steamship lines, their duty being to travel from foreign ports on the vessels with the alien women, mixing freely with them, forming their acquaintance, and gathering every available bit of information concerning their antecedents and their purposes and hopes in coming to America. Thus could be gained, it is believed, often accurately and in detail, data which could be placed before the boards of special inquiry upon arrival at the United States ports, enabling such boards to pass intelligently upon the admissibility of the alien women.

Of course, the greatest care would have to be exercised in selecting women for positions of such responsibility. Doubtless the steamship lines would consent to such an arrangement, and the cost involved would be inconsiderable as against the importance of the object in view. Little or nothing, comparatively, can be accomplished by an inspection of, and intermixture with, the female steerage passengers after the vessels reach quarantine stations on our coasts—the period from that time till landing is too limited—but under the arrangement suggested the time would be ample for women possessing the requisite qualifications of mind, heart, and temperament to ascertain much of interest regarding the passengers among whom they would mingle.

Reference to Table III (p. 82) will show that during the year there were rejected at the ports of this country 341 aliens who had been convicted of a felony or other crime or misdemeanor involving moral turpitude. This is another class with regard to which the conditions are such as to make it extremely difficult for the inspection officers to obtain evidence that will justify rejection on the ground stated. There can be no question that many more of this class enter than are detected and deported, and some means should be provided to aid in their apprehension. Several of the European countries, notably Italy, require that persons emigrating therefrom shall obtain passports. In the event that the person applying for and receiving the passport bears a criminal record, a notation to that effect appears on its face. It is suggested that this device could be seized upon as a valuable aid to the United States immigration officials. Possibly its adoption could be secured in either one of two ways—first, as the result of an international conference, for the calling of which provision has been made in the new law (see also pp. 135 and 136), or, second, by adopting legislation requiring the presentation of a passport as a prerequisite to the examination of an alien applying for admission to the United States. The Bureau is convinced that some measure of this kind is imperatively needed. The current history of the perpetration of heinous crimes throughout the United States by foreigners domiciled therein, especially by the members of the "Black Hand" and other like societies, is evidence that needs no special comment; and, as already pointed out, the provisions of existing law are inadequate to insure even a reasonable degree of protection against this serious and growing evil.

The Bureau also renews the suggestion made in the report for last year and in the preceding report (pp. 64 and 77–78, respectively)

that a comprehensive digest of the immigration law be published in the principal foreign languages and extensively distributed abroad, with the object of educating foreign peoples concerning the difficulties which are placed in the way of the immigration to this country of the undesirable classes. It is believed that this could be done at comparatively slight cost and that the results would be beneficial.

4. Distribution of Aliens.

This subtitle has found a place in the annual reports for several years, for it covers a subject in which the Bureau has always taken a lively interest. Its belief has been that the most important factor in the solution of the immigration problem consists of a remedy for the congestion of the foreign elements in our great cities, which congestion results in the practical isolation of the aliens from the influences that ought to be exerted toward their Americanization, beginning with the very moment that they enter our gates. The "colonies" formed in such cities as New York, Chicago, Boston, and Philadelphia are to-day the chief menace that grows out of the heavy influx of foreigners. To make Americans of many of the aliens now coming to us, even in the second and third generation, they must be brought into contact with our own people and our own customs and methods of living. The physical, mental, and moral welfare of the aliens themselves, as well as the interests of the communities, demand that they shall not be brought from the small towns, the villages, hamlets, and even the farms of Europe, and crowded into the tenements of our cities, where they meet conditions of life to which they are not accustomed and where such diseases and vices as exist among them are given every encouragement to develop and spread. In this connection particular attention is directed to Table VII (p. 96), from which it will be seen that in the year just closed, as heretofore, the vast majority of the arriving aliens have been destined to a few of the large centers of population; that 386,244, or over 30 per cent of the entire number, claimed New York as their ultimate destination; that 230,906, or over 17 per cent, were going to Pennsylvania; 104,156, or over 8 per cent, to Illinois; 85,583, or 7 per cent, to Massachusetts; and 70,665, or 5 per cent, to New Jersey. When it is realized how much space there is in other sections still vacant and crying out for settlers and cultivators, where the condition of the aliens would be incalculably better than in these already overflowing localities, the deplorable nature of the situation is apparent and leads inevitably to the query, Is there not some remedy at hand?

The Bureau believes that, in adopting its recommendation for providing means for disseminating information among arriving aliens by the establishment of a Division of Information, Congress has taken a step in the right direction—one which will, in the course of time, exercise a marked influence for improvement in the way of preventing further congestion by encouraging the aliens to proceed to sections where they are needed and can be assimilated. After a fair start is once obtained in establishing the new arrivals in sparsely settled districts, the nuclei so inaugurated will draw others in rapidly increasing numbers, and after a while—particularly if there should be any marked change in the conditions which produce the present

phenomenal immigration—the influence of this gradual distribution should begin to be exerted, by the very force of circumstances, on the overcrowded "colonies" of our large cities.

Whatever may be said in opposition to the establishment of such a branch of the Bureau, it can hardly be contended that the experiment is not worth a trial. Congress has authorized its inauguration, and the Bureau is sure that no energy and pains will be spared to insure its success. On the day of this report's date there has been placed in charge of the new division a man whose talents and experience promise well for the accomplishment of good work. Among the many able men who have made a study of the sociological conditions of this country, it is not thought one could have been found better, if as well, equipped for this particular class of work as Terence V. Powderly. The matter is one requiring just such a judicious treatment as it is likely to receive at his hands. Necessarily progress at first must be slow, for every step must be carefully planned and discreetly taken; but the Bureau is hopeful of the gradual accomplishment of valuable results.

The desire of particular sections of the country for immigration, and the discussion of ways and means of securing it, especially in the Southern States, have engaged the attention of the Bureau to a considerable extent in the past year. The position taken by it has been that two leading considerations point to the propriety, if not necessity, of an encouragement of this desire, and assistance so far as possible in its fulfillment—first (and already mentioned), the indirect, but powerful, influence that the establishment of a part of the arriving aliens in such sections must eventually exert upon the congested conditions existing in our northern and eastern cities; and, second, the fact that Congress, recognizing that many of the States and Territories were in need of settlers, made in the law a special exception in favor of such States and Territories advertising the facilities and inducements they offer to settlers. The Bureau has not hesitated, therefore, so far as lay in its power and within what it conceived to be the lawful limits of its duties, to offer encouragement and assistance in the furtherance of the plans of the immigration commissions appointed in several of the States and Territories. In doing this it has given advice concerning the meaning and intent of the law, always being careful to caution those making inquiries that no plan could be countenanced that included within its scope any indirect furtherance of schemes on the part of labor employers to obtain cheap labor, or any violation of the provisions of the law relating to alien contract labor; and has arranged for the prompt examination of aliens brought from abroad under the auspices of, and in response to, advertisements by States or Territories. Two prominent instances of this kind have occurred:

The State of South Carolina early in the year made arrangements for the settlement therein of a number of Belgians—mostly weavers and mill operatives—for which class of labor there was a heavy unfilled demand among the cotton mills of the State. On November 4, 1906, the North German Lloyd steamship *Wittekind* entered the port of Charleston with 473 aliens on board, coming in response to advertisements made in Europe by the immigration commissioner of the State, who accompanied the party on the voyage over. The Commissioner-General was present with a selected corps of employees,

detailed from Baltimore, Philadelphia, and New York, and the examination of the aliens under the immigration laws was promptly conducted. They were found to be, in the main, an excellent lot of men and women; and undoubtedly, if they are made to feel contented and to prosper in their new homes, they will exert a powerful influence upon the future settlement of the State.

The other instance occurred in the Territory of Hawaii. On April 24, 1905, the legislature of that Territory passed an "Act to provide for a board of immigration," in pursuance of which two commissioners were appointed in the summer of 1906 to proceed to Europe and secure white settlers for the islands. They chartered a boat, the *Suveric*, and brought to Honolulu about 1,300 Portuguese, who were landed on December 1 and 2, 1906. Later, two other shiploads were brought—the *Heliopolis* landing on April 26, 1907, about 2,300 Spanish aliens, and the *Kumeric* reaching Honolulu on June 27, 1907, with about 1,100 more Portuguese. Thus, there has been added to the white population of the islands almost 5,000 settlers, whose influence upon the future of the Territory can hardly be foretold or imagined. The Commissioner-General was present when the *Suveric* arrived, and was very favorably impressed with the appearance of the aliens and with the reception accorded them by the people of Honolulu.

In one respect the new immigration law contains a significant and important change affecting the above-mentioned privileges of the States and Territories to encourage the immigration of settlers—a change apparently intended to fix with certainty the extent to which the encouragement may be carried. This consists of the provision in section 2 by which any alien whose passage has been paid by another is required to show affirmatively, not only that he does not belong to one of the excluded classes specifically enumerated in the said section, but also "that said ticket or passage was not paid for by any corporation, association, society, municipality, or foreign government, *either directly or indirectly*." With regard to this new provision, the Attorney-General, in an opinion rendered on March 20 last, stated:

> While, therefore, the payment of the passage money of such immigrants by a State with its public funds is not prohibited, its payment with funds contributed by any society or association renders the immigrant liable to exclusion, although the payment may be made through the agency of the State or its officers, and although the immigrant would be otherwise entitled to admission.

5. Alien Contract Laborers.

It can not be said that any particular cases stand out prominently in such of the work of the year as has been devoted to the enforcement of that portion of the law which relates to this subject. The difficulties attendant upon the administration of the law were described in the annual report for 1905 (pp. 44–46), and were again alluded to in the report for last year (p. 65). It was no easier of enforcement in 1907 than in the preceding years. In this connection the Bureau is hopeful of better results under the new act, which is drawn in terms much more certain than the old, especially the clause of section 2 thereof descriptive of what constitutes a "contract laborer," viz, a person who has been "induced or solicited to migrate to this country by offers or promises of employment or in consequence of agreements, oral, written, or printed, express or implied, to perform

labor in this country of any kind, skilled or unskilled." This definition should, in the Bureau's judgment, set at rest all controversy as to whether the act of 1903 was sufficient in its terms to do more than exclude aliens actually "under contract" in the ordinary sense of the term—a view quite extensively entertained. If that view had been followed by the immigration officers during all of the four years of the existence of the act of 1903, comparatively few of this class of persons would have been excluded; for it is next to impossible, even in cases where a specific agreement actually exists, to obtain evidence of its existence. In fact, so thoroughly familiar are both aliens and those interested in violating this statute with the construction that has been placed upon it by the administrative officers that, beyond any question, many evasions have occurred. Great activity in this respect has been apparent during the past few months. Party after party of aliens has arrived at the large seaports, the members of which were not only traveling together, but were enlisted from the same localities in Europe, were destined to practically the same addresses in this country (usually in one of the large centers of labor employment), often carrying slips of paper or cards giving addresses of supposed relatives or friends, written quite apparently by the same hand, yet when questioned these men were found to be quite ready with evasive or misleading replies to all questions calculated to develop that it was their intention to accept prearranged employment, and it was impossible to secure any direct evidence of the existence of an agreement or contract, or even of an assurance of work awaiting them; circumstantial evidence of varying degree is all that could be procured. A few cases of this character were the following:

Case of Ruzi Dimitroff and 24 other Bulgarian laborers, who arrived at the port of New York on May 22, 1907, accompanied by a fellow-countryman acquainted with the English language, who claimed to be in their employ as guide and interpreter: These laborers stated they were destined to various addresses in Chicago, but each of them also had in his possession the name and address of a certain Bulgarian located in Gresham, Wis., which town, quite apparently, was their ultimate destination. It appeared from the testimony that about 250 Bulgarians had recently started from their native country for the United States; and it was evident, although no direct admission could be drawn from the aliens, that they were but one party of a number migrating with a well-defined purpose to accept employment in certain sections of the United States. Their testimony was evasive and contradictory and calculated to produce the impression upon the mind of anyone reading it that the aliens had been carefully coached as to the line of questioning which they might expect to meet upon arriving at a port of this country.

Case of Atanas Genchoff and 12 other Bulgarian laborers, who arrived at the port of New York on June 10, destined to various addresses in Madison, Ill., each having in his possession a sum of money approximating $20: No direct evidence or admission of prearranged employment could be procured, and yet it was apparent, from the manner in which questions were answered by each member of the party and their refusal to accept employment at any other point than the destination given, that they were seeking to enter the United States in violation of the spirit and intent of the law.

Case of Todor Nedkoff and 33 other Bulgarian laborers, who arrived at the port of New York on June 13, destined to Chicago, Ill., concerning whom it was found impracticable to elicit admissions or to procure evidence showing the existence of agreements for employment. In this case, also, there were the internal evidences of coaching and evasion that so frequently appear in such instances. The men could not give satisfactory accounts as to how, in a country in which the ordinary manual laborer is paid a wage of less than 20 cents a day, they had been able to pay their own passage as claimed.

Case of Trifko Bulalovic and 25 other Montenegrin laborers, who arrived at the port of New York on June 27, destined to various addresses in Chicago: These aliens were subjected to a rigid examination at New York, and a searching investigation was conducted in Chicago; yet it was impossible to develop direct evidence of the existence of a contract for their employ, although the testimony of the aliens themselves, being of the generally unsatisfactory character of that contained in the cases already mentioned, was sufficient to satisfy the members of the board of special inquiry, the commissioner at New York, and the Department, to a moral certainty, that such a contract actually existed.

Case of Petar Andreff and 18 other Bulgarian laborers, who arrived at the port of New York on July 1, destined to Madison, Ill., in which there was the same moral certainty of prearrangement for employment, and the same lack of actual evidence of it as noted in the other instances.

The above cases relate to Bulgarians and Montenegrins exclusively, but the files of the Bureau contain various others of a similar character arising at different periods during the fiscal year, which concern aliens from other of the southeastern European countries. Altogether, the attempts to violate the law have been numerous and varied. Many of them have been frustrated, but, doubtless, in other instances where the plans of the importers were more unusual and less easily detected, the law has been violated with impunity.

The provisions in the new act (sec. 24), allowing the expenditure of $50,000 annually for the special purpose of enforcing the alien contract-labor laws, will, it is thought, be of incalculable benefit, and the Bureau will be much disappointed if, with the added facilities of investigation thus afforded, definite and valuable results are not attained. It will now be possible to devote more time and better talent to the investigation and remedying of this important matter. So long as healthy, honest, industrious laborers, either unskilled or skilled, seek this country impelled by no other motive than a desire to better their condition, by availing themselves of a natural demand for their services, no one is entitled to complain, but the moment that the migration of any class of laborers is induced, encouraged, or assisted by the prospective employer, there is an encroachment upon that principle essential to the protection of our own institutions and standards of living and constituting the very marrow of the alien contract-labor legislation, which requires that preference shall be given by the employer to our own labor market in the selection of his employees and that a foreign source of supply shall be resorted to only in case of absolute necessity, and even then solely by the

statutory means. This means is the proviso to section 2 of the immigration act reading:

And provided further, That skilled labor may be imported if labor of like kind unemployed can not be found in this country.

Circumstances occasionally arise under which it becomes necessary to accord the privilege of this proviso to employers of skilled labor. Such a case was one, known as the "Lithographer's case," which has been somewhat widely noted and concerning which an erroneous impression has arisen in the minds of some. On May 2 last there arrived at Ellis Island from Germany two expert lithographers, whose passage had been paid by, and who were under contract with, the American Lithographic Company, of New York City. This company claimed that the men were being imported to accept positions which it was impossible to fill from the local labor market. The admission of the two lithographers was opposed by the officials of the National Lithographic Artists, Engravers and Designers' League, of New York. Both sides were accorded every opportunity to introduce testimony. All of the witnesses produced were carefully examined before a board of special inquiry. The record thus made up was transmitted to the Bureau, where it received careful consideration, resulting in the conclusion that the contention of the American Lithographic Company was borne out by the evidence, and that the two lithographers were entitled to enter under the proviso above quoted. This decision by the Bureau was referred by the Department to the Solicitor and was by him confirmed; whereupon the entire case was transmitted to the Attorney-General, who handed down an opinion also confirming the Bureau's holding. In considering this case, the Bureau followed its universal and well-defined policy of requiring the most convincing proofs whenever an effort is made to establish that certain aliens come within the exception to the contract-labor laws, for it believes, and has always maintained, that these special exceptions are to be strictly construed, and that no one is to be granted the privilege contemplated thereby in the absence of a wholly satisfactory showing.

The most distressing branch of the alien contract-labor law violations is that which involves the use of what has come to be commonly called the "padrone system;" for by this means not only is foreign labor introduced under contract or agreement, but often the laborers are mere boys and are practically enslaved by the padrones who effect their importation. This system is applied principally to youths of the Italian and Greek races, the boys being placed at hard labor with long hours, under conditions wholly unsuited to their age, and subjected to a wage arrangement which amounts practically to a method of blackmailing—in other words, they are in effect owned by the men who advance the money and procure their immigration from Greece and Italy. At the suggestion of the Department there was incorporated in the new immigration bill (sec. 2) a provision intended to reach these cases, and the Bureau trusts that in the future it will be possible to prevent the importation of more of this class than in the past. At the date of this report several important prosecutions against alleged padrones are about to be instituted, based upon investigations conducted during the early summer, resulting in discoveries that tend to show wholesale violations of the law by certain firms of importers located in some of the large cities of the West. Success is hoped for,

because the punishment of some of the leading padrones will accomplish more toward discouraging the traffic than the detection or apprehension of hundreds of the boys.

6. The Canadian and Mexican Borders.

With regard to the Canadian border, the Bureau has been able for several years past to report the most satisfactory conditions as to the enforcement of the immigration laws. The amicable relations existing between the Canadian immigration officials and those of this country, and the agreement between the Commissioner-General and the Canadian transportation companies, made it possible to build up a system of administration which could hardly be surpassed. There are located at the Canadian seaports and border ports exceptionally well qualified and efficiently organized employees, controlled and supervised by an able and conscientious chief officer, the United States commissioner of immigration for Canada, so that almost ideal conditions exist.

As soon as the act of February 20, 1907, was passed it became apparent that a renewal of the agreement with the Canadian transportation companies, with some amendments to meet the new provisions of the law, must be sought. The Bureau, therefore, called a conference of the officials of said companies to meet with it in Washington on the 24th day of April last, the result of which was the adoption of a new agreement, which practically all of the Canadian companies have already signed. The said agreement has been incorporated in the Regulations of July 1, 1907 (Rule 25), changed only in the minor respects necessary to reduce it to the form of a rule.

There is one respect in which the immigration law of this country, when it happens to run counter to the similar law in force in the Dominion of Canada, fails to work smoothly and to the satisfaction of both countries. It becomes more and more apparent that some reciprocal arrangement is needed under which it will be possible for each country to enforce its own statutes without encroaching upon the laws of the other. Cases of this character frequently arise: An alien after having been admitted to the United States and having resided here for a period of years proceeds to Canada and there becomes a public charge. Under the Canadian law he is subject to deportation to the country from which he entered Canada, but under the United States statute, being an alien, he can not be allowed to land in this country. A similar situation arises with regard to aliens who enter this country from Canada after having lived there for a period of time in excess of that covered by the agreement (par. 8). The law should be so amended as to permit of the readmission to this country of aliens who, within a period of three years from the date of landing at a United States port, have proceeded to Canada and become public charges, and to also provide for the deportation to the country from which they came to the United States of all such aliens so readmitted from Canada. Such legislation should be supplemented by a formal agreement with the Canadian government by which the two countries would allow the return to each mutually of aliens who have become public charges within the statutory period after admission, irrespective of whether or not deportation to the transoceanic country of origin can be effected.

With the commencement of the coming fiscal year there will be inaugurated on the Mexican border the first stages of what the Bureau hopes may eventually become a method of administration similar in all essential respects to that so successfully operated for several years in Canada. An officer of tried and proven ability, F. W. Berkshire, for the past four years in charge of the Chinese district of New York and the ports of entry for Chinese of New York City and Malone, has been appointed supervising inspector of the Mexican border and placed in charge of the enforcement thereon (his jurisdiction extending from the Gulf of Mexico to the California-Arizona line) of both the immigration and the Chinese exclusion laws. This plan the Bureau confidently believes will materially improve the administration of both sets of laws, where, in view of the character of the difficulties to be met, distressing conditions have heretofore existed. But, while a consolidation of forces and of administration will help, it can not be expected of itself effectually to relieve the existing evils. The Bureau is satisfied that an effectual remedy will be found in nothing less than a thoroughly planned and definitely arranged understanding with the Mexican Government and the Mexican transportation companies, similar to that with the Canadian officials and companies already mentioned. Some discussion and negotiation having that object in view have already taken place. As it is understood that the railroad lines of Mexico are to come under Government control, there should be no serious obstacle to arranging with Mexico, by treaty if necessary, for cooperation in the enforcement on her borders of our immigration laws. The Bureau urges the necessity for this action, being satisfied that it is the only feasible plan for effectually protecting the United States against an influx of the most undesirable aliens at the only point not already reasonably protected. If such an understanding can not be reached, the Mexican border should be closed to the admission of any but citizens and bona fide residents of Mexico, and its use as a sojourning place by those classes that can not enter at our seaports so discountenanced.

Notwithstanding these generally unsatisfactory conditions on the Mexican border, the vigilance of the officers stationed thereon has been such, and efforts for the prevention of violation of law have been so vigorously exerted by them, that, but for one circumstance, it is thought the Bureau would have been able this year to make a somewhat more encouraging report than heretofore concerning the operation of the immigration laws on said border. Gradually, during the first eight or nine months of the year, the means for guarding the boundary were supplemented and enlarged, so that it was possible to feel assured that a larger percentage of the aliens entering from Mexico were being examined than theretofore. The last proviso to section 1 of the new immigration act, made effective March 14 by the President's proclamation of that date, is the circumstance alluded to. This provision placed upon the officers stationed upon both the Canadian and the Mexican borders an additional burden, which, so far, candidly speaking, is found too heavy to carry successfully—at least with the means for its enforcement afforded by the law and evolved by regulation. Japanese laborers in large numbers are, and have been for months, flocking to both Canada and Mexico. That in the vast majority of cases their intention (usually formed, it is believed, before embarking for the voyage over) is to enter the United States the

Bureau is convinced. In other words, these laborers merely use foreign contiguous territory as a place of temporary sojourn while perfecting plans for proceeding to points in this country. Reports received from immigration officials located in Canada and along the Mexican border show beyond question that such is the case. (See report of commissioner of immigration for Canada quoted under subtitle 8 hereof, p. 158.)

Of especial interest, in connection with the Mexican border, are two reports made by Inspector Marcus Braun, who has been detailed on several occasions for the conducting of special investigations in the said Republic and along the boundary line, which reports bear upon the enforcement of the immigration laws in general and have some particular reference to the ingress across those borders of Japanese laborers, who, after proceeding to Mexico under contract with certain Mexican companies, abandon such employment and proceed to this country, knowing that they will be able here to earn much larger wages than in Mexico. Space will not permit of the inclusion herein of the entire text of Inspector Braun's two reports, but the following extracts covering some of his most interesting observations are given:

NEW YORK, *February 12, 1907.*

SIR: * * * I left New York on December 1, 1906, and went to Habana. * * * I boarded a steamer which had arrived in Habana the day I reached that port, on her way to Vera Cruz, Mexico, with nearly 1,000 passengers on board; of these about 700 were Spaniards going to Mexico with a view to work there, to join relations, etc., while 250 of them were Syrians, almost all of whom were bound for the United States. * * *

These Syrians had made a rather roundabout trip to reach the United States. It was, however, not the fascination of a longer sea voyage which induced them to do this, nor was it cheaper for them; it was necessity with some; aforethought with others. The steamship agents at Beirut, Naples, Marseille, or Havre, from which points they had intended to embark on shorter, more direct routes, coming directly to New York, Boston, or Philadelphia, had rejected "some" as afflicted with trachoma, while the "others" were advised by steamship subagents or runners to go via Mexico, as by that route their entry was "easier;" they being told that on the Mexico-American border the examination would be less strict, or that they might evade the examination entirely. * * * Of the 250 Syrians I met on the steamer 20 per cent were desirous to reach New London, Conn., and a like number were heading for Fort Wayne, Ind., which cities seem to be the central points from which Syrian "merchants" start on their itineraries in pursuit of their vocation. On their arrival in Vera Cruz none of them were subjected to any examination such as would be required by our laws, and the majority of them reached or will reach the United States by the famous, or rather infamous, underground system of smuggling themselves or being smuggled into the territory of the United States. The fact is, only few, perhaps three or four of the 250, remained in Vera Cruz, about a score of them in Mexico City, while the balance moved northward toward the American border. Among these 250 Syrians I found some who had heretofore attempted to enter the United States via eastern ports, but were deported as afflicted with trachoma, yet within a few days after their arrival in Mexico they were on their road to Indiana, Connecticut, or other points.

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The 250 Syrians who had been my traveling companions, upon our arrival in Vera Cruz, were taken in charge by some countrymen, evidently runners, who awaited them, and taken to a store owned by one Antonio Sarobo, a Syrian himself. After receiving certain instructions these immigrants were in the evening of the same day sent on to Mexico City. * * * I went with them to the City of Mexico. Upon their arrival they were conducted to the place of one Kuri Primos, who, I am told, is the leading Syrian merchant of the Republic of Mexico. Here I found a regular mail delivery to the newcomers, letters from the United States awaiting almost every one of them, many of the letters containing money orders.

Early in January I visited Vera Cruz again. Three steamers, the German liner *Fuerst Bismarck*, the French liner *La Champagne*, and the Spanish steamer *Alfonso XIII* were due. The three steamers brought about 150 cabin and in all about 2,000

steerage passengers. The bulk were Spaniards, but there were among them 600 Syrians, almost all heading for the United States. Scattered among the steerage passengers were a few Italians, a few French, and a handful of Greeks.

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I have stated before that to secure reliable data as to the number of immigrants coming into Mexico is very difficult, if it be not an impossibility, but I have been assured that during the last year and a half 8,000 Japanese and 5,000 Chinese have entered the Mexican Republic. To-day, however, there are not 2,000 Japanese and not 15,000 Chinese in all Mexico, although according to a conservative estimate more than 45,000 Chinese have come to Mexico, and few ever returned from there. The Mexican-Chinese-Japanese transportation companies—steamers from all the Mexican ports—have not taken them homeward to the Orient. Where are the Japanese and Chinese that have come to Mexico and did not remain in that Republic? The almost irresistible conclusion is they found their way to the United States.

* * * * * * *

Mexico is in dire need of labor, and for many years past the Republic imported all the labor that could be hired to come into the land. It seems, however, that from wherever labor was brought in it could not be prevailed upon to stay, be it from climatic influences or for economical reasons. The employers of labor in Mexico then tried the importation of Japanese laborers.

* * * * * * *

The first attempts at bringing Japanese labor to Mexico were made about a year and a half ago, and up to the time that I made my investigations over 7,000, all told, had been imported. None of the ships that brought laborers from Japan to Mexico took one Japanese passenger back, as I was informed by the managers of the emigration companies, and yet there are at present hardly 2,000 Japanese in the whole Republic of Mexico. As the result of subsequent inquiries I made as to the passenger traffic to and from Mexican ports, I could not find that any Japanese laborers left during the last year at any port, and necessarily the conclusion is forced upon me that they have gone into the United States, although the records of our various immigrant stations along the Mexican border do not show anywhere near such a number as having made application to enter our territory. In fact, the agent of one of the transoceanic emigration companies of Tokyo told me that his company was simply in despair by reason of the fact that fully 80 per cent of those whom they had imported deserted immediately after their arrival and went to the United States.

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The sum and substance of my recent investigation in Mexico crystallizes itself into the conviction that, taking the most conservative view, fully 15,000 aliens from Europe and Asia enter the United States annually from Mexico.

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NEW YORK, *June 10, 1907.*

SIR: * * * While the instructions of the Bureau in detailing me on February 25 to the Mexican border were to the effect that I should investigate the question of infractions of our alien contract-labor law, yet I had opportunity and occasion to look into all other phases of immigration of aliens from and via Mexico, and more particularly into the question of Japanese immigration. With reference to the latter I regret not to be able to report any improvement. In my report of February 12, 1907, as well as in my numerous reports during the months of March, April, and May, I referred to the continuous stream of Japanese crossing into the United States, legally before the order of the President was promulgated in Department Circular No. 147, and surreptitiously ever since. The emigration companies * * * regard the business of hiring out laborers only as a side issue. Their main business is to get the passenger traffic for their steamers which they charter from Japan to Mexico, and the best inducement they can offer in Japan is telling these ignorant laborers that the making of a contract to work in Mexico is not binding at all, but that it is the only safe way for them to come into the United States after they have landed in Mexico, and that no power on earth can stop them.

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The situation, as far as Japanese immigration via Mexico is concerned, can be summed up as follows: The Japanese know that their coming to the United States with passports for Mexico or Canada or the Hawaiian Islands is prohibited; yet they also know that if they succeed in entering the United States without passing an inspection they have ninety-nine chances out of a hundred in their favor to remain in the country. * * *

From now till the end of the year probably from 6,000 to 8,000 Japanese will be brought into Mexico; in all, over 10,000 have been brought there in less than two years. At the present moment about 1,000 can be found in all the Republic of Mexico. This last statement is based on personal investigations made by both Interpreter Pruett and myself. Between the two of us we have visited every spot in the Republic of Mexico where Japanese had been imported. In places where we were told that 1,000 had been brought, we found 20, and so on at a similar ratio. Some of the Mexican mine and plantation owners were told by some of these emigration companies that if they would import women it surely would be an inducement for the Japanese laborers to stay, and some of the companies * * * have signed a contract for the importation of Geisha girls; but I am assured by people who know that this is simply a new phase of immigration we will have to cope with at the border; because these girls will do the same as the men have been doing and are doing, and will try and finally succeed in finding their way into the United States. * * *

In my various reports I have often pointed out the fact that Japanese apply at some port of entry on the Mexican border to be permitted to go to Canada in transit through the United States, and after that, this being a mere subterfuge to get into the United States, get off at the point they want to reach, mostly California, and redeem the unused portion of the railroad ticket. I have no reliable data at hand, but I understand that quite a number of Japanese have so applied at the various ports of entry on the Mexican border and have been admitted, but that not one of them has passed out of the United States, as they should have done according to their railroad tickets, which in most cases read "To Vancouver or Victoria, British Columbia." Another circumstantial evidence that these applications for coming through in transit are but a subterfuge is that for the last few months there has existed a most excellent steamer service between Canadian and Mexican ports on both the Atlantic and the Pacific coast, and while it is much cheaper and much more convenient for an immigrant to avail himself of that transportation than by taking the long railroad ride first through the Mexican Republic and then all through the breadth of the United States, nevertheless the railroad transportation is the one these immigrants insist upon taking.

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As far as other immigration is concerned, namely, of Syrians and Greeks, I have to report that it is on the increase. The steamers landing in Mexico bring more and more of that class of aliens, and I have seen in the office of the Mexican Central Railroad Company some correspondence with European steamship companies speaking about the increased traffic in emigrants who want to go to the southwestern parts of the United States via Mexico. From that correspondence it appeared to me that transportation companies in Europe are making an effort to get as many emigrant passengers as possible for the United States via Mexico.

As far as the service on the border is concerned, * * * it is in much better condition than it was, and with the numerous increases which the Bureau saw fit to make, as well as with the placing of the whole border line under one responsible head, I am positive there will be a still greater improvement. Yet this does not mean to say by any means that the Bureau will be able to control the Mexican as thoroughly as the Canadian border. * * *

On the direct question of enforcing the President's proclamation of March 14 last, relating to the exclusion of Japanese laborers under certain conditions, which, as already pointed out, arises principally in connection with the guarding of the land boundaries, there are inserted at this point several tables showing the number of Japanese admitted to the continental territory of the United States during the past and the preceding year; the number rejected, with causes of rejection, since the promulgation of the proclamation, and the occupations claimed by the male adults admitted since such time.

JAPANESE ARRIVALS IN CONTINENTAL UNITED STATES, FISCAL YEARS ENDED JUNE 30, 1906 AND 1907, BY MONTHS.

Month.	1906		1907		Increase of admissions.	Month.	1906		1907		Increase of admissions.
	Admissions.	Rejections.	Admissions.	Rejections.			Admissions.	Rejections.	Admissions.	Rejections.	
July	373	9	551	28	178	February	332	10	813	94	481
August	294	33	846	30	552	March	394	17	1,033	146	639
September	506	28	657	83	151	April	391	33	728	88	337
October	447	27	608	28	161	May	752	42	877	50	125
November	387	13	672	28	285	June	824	57	1,134	46	310
December	335	19	877	97	542						
January	164	15	1,359	133	1,195	Total	5,199	303	10,155	851	4,956

All Japanese admitted since the promulgation of the proclamation (except a few not belonging to the laboring classes admitted at Canadian ports and a few returning to resume formerly acquired domiciles) were in possession of passports entitling them to enter the continental territory of the United States.

JAPANESE REJECTED, AND CAUSES THEREFOR, APRIL, MAY, AND JUNE, 1907.[a]

Cause of rejection.	April.	May.	June.	Total.
Dangerous or loathsome contagious diseases	30	17	30	77
Contract laborers	15	.....	3	18
Paupers or likely to become public charges	5	13	4	22
Without passport	38	20	9	67
Total	88	50	46	184

OCCUPATIONS OF JAPANESE MALE ADULTS ADMITTED IN APRIL, MAY, AND JUNE, 1907.[a]

Occupation.	April.	May.	June.	Total.	Occupation.	April.	May.	June.	Total.
Actors	2	4	8	14	Cooks	9	10	9	28
Clergy	4	2	1	7	Restaurant and hotel keepers	10	11	10	31
Editors	2	.....	1	3	Servants	5	2	4	11
Government officials	2	19	8	29	Farm laborers	97	113	135	345
Sculptors and artists	3	.....	3	6	Farmers	85	75	86	246
Teachers	12	11	16	39	Laborers	69	49	73	191
Other professional	6	5	5	16	Merchants	63	61	88	212
Barbers	1	.....	8	9	Students	248	348	355	951
Carpenters	1	4	4	9	Other occupations	12	10	17	39
Tailors	5	3	4	12					
Other artisans	15	8	15	38					
Clerks and accountants	12	7	2	21	Total	664	745	852	2,261
Gardeners	1	3	.....	4					

[a] Hawaii not included.

As a rule the passports presented by Japanese do not describe their occupation. The occupations above stated, therefore, are based principally upon the statements made by the applicants at the time of their admission, for which fact due allowance must be made on the question of the accuracy of the figures.

7. IMMIGRATION STATIONS.

The station first to be considered and discussed in any report bearing upon immigration is, of course, that located at Ellis Island, New York Harbor. Through that port have come during the past year

1,004,756 of the 1,285,349 aliens admitted to the United States. The work involved in properly handling and caring for this multitude is described concisely, and yet with sufficient detail, in the report of Commissioner Watchorn, quoted under subtitle 8 hereof (p. 154). It has been necessary during the past year, as in the preceding, to limit the number of examinations to occur in any one day to 5,000, there not being sufficient accommodations for the proper inspection of any greater number. The Bureau has repeatedly drawn particular attention to the utter inadequacy of the Ellis Island station to meet the unforeseen conditions that have arisen since the erection of the original building. Some extensive improvements and additions have been provided for, notably the building of the new island and the construction of a hospital thereon, and the alteration and remodeling of the interior of the station; but to make the equipment what it should be will require further extension.

The Bureau must again urge with all the emphasis at its command the immediate construction of a refrigerating plant large enough to meet present requirements. The plant now in operation at Ellis Island is inadequate, and the recommendation contained in last year's report (p. 70) that an appropriation be made for this purpose is renewed, the amount thereof to be fixed at $35,000. The plant now in use was designed to furnish ice for an average yearly arrival of less than 500,000 immigrants. One new hospital building has been opened on the island, and another, intended for the reception of insane persons, and two portable pavilions for use in housing psychopathic cases, will soon be ready for occupancy; in addition to which six contagious-disease hospitals are in course of construction, and eleven more buildings of the contagious-disease group are about to be contracted for. To furnish ice for these new buildings no provision whatever has been made. During the past year the refrigerating plant has been forced far beyond its capacity, resulting in many breakdowns and in much distress. It has been necessary to purchase extra ice at the rate of $4.40 per ton, as against a cost of $1.63 per ton for that manufactured in the plant. When the new buildings are all in operation it will be necessary, unless additional refrigerating facilities are furnished, to purchase 15 tons of ice per day at the rate above mentioned, so that the installation of the new refrigerating plant would effect an annual saving of approximately $14,000.

The Bureau also pointed out in its last report (p. 71) the desirability of building another ferryboat as a companion to the *Ellis Island*. That boat has now been in use for more than three years, running almost constantly between the island and New York City, and has been subjected to a very severe strain. When necessary to make repairs to the vessel, it is almost impossible to charter a suitable boat as a substitute, and even such as can be procured are unreasonably expensive. Both convenience and dispatch in the handling of arriving aliens would be materially subserved by the alternate use of an additional boat; and aside from any question of this kind, and as a bare matter of common-sense economy, another boat should be immediately constructed and placed in commission. For this purpose an appropriation of $125,000 should be made. The *Ellis Island* cost $91,715, but both labor and materials are now much more expensive than at the time of her construction. (See also Commissioner Watchorn's report, p. 154.)

The need of another water main from Jersey City to Ellis Island becomes constantly more apparent. The dredging operations between the island and said city necessitated the abandonment of the old main, which had been used as a reserve source. The necessity for an abundant supply of fresh water is too apparent to require explanation, and the Bureau trusts that an appropriation of $18,000 may be obtained with which to install an additional main. On several occasions it has been recommended that a plant for the purification of the water furnished Ellis Island should be constructed. There can be no question but what the water now furnished the station is far from satisfactory in this respect. Fortunately there has not yet been any disastrous result, such as an epidemic or the breaking out of disease, the origin of which could be traced to the water, but this is not a sufficient reason for a failure to provide the station with water that is absolutely pure. It is therefore again recommended that $20,000 be provided for said purpose.

To facilitate the proper handling of the baggage of arriving aliens, by making available the new baggage room now in course of construction on the east end of the island, the harbor in the vicinity of said baggage room should be dredged, permitting the docking of vessels immediately alongside thereof. To do this work, it is estimated that an appropriation of $65,000 will be required.

At Ellis Island also additional hospital facilities beyond any heretofore appropriated for are imperatively demanded by the increasing number of arriving aliens. On this subject the Public Health and Marine-Hospital surgeon in charge states, in his annual report:

> The extension of the immigrant hospital was opened for the reception of patients in April last, but the accommodations are inadequate for the requirements of the service. In order to provide sufficient hospital accommodations at Ellis Island, an additional wing, corresponding in general construction to that of the original hospital building, is an absolute necessity.

For this purpose $250,000 will be required, and the Bureau recommends the appropriation of that amount.

Under the several appropriations already granted, six buildings of the contagious-disease hospital group are rapidly approaching completion. Bids for the remaining eleven buildings of this group have been opened, and said bids show that in order to complete the group and properly equip the buildings an additional amount of $150,000 will be required. That there may be no unnecessary delay in this highly important work the Bureau urges that an appropriation of said amount be promptly procured.

The Government does not own an immigrant station in the city of Boston, but has to depend upon rented quarters, supplemented by accommodations furnished by the steamship companies. The Bureau has made the best arrangements possible at that station for the expeditious and safe handling of arriving aliens, but the lack of modernly equipped buildings has been the subject of much adverse comment, and there can be no question but that the situation could be greatly benefited by the erection of proper quarters. By referring to the immigration financial statement (p. 161) it will be seen that during the past year $162,358.25 were collected at the port of Boston, and it is shown by former reports that in the year 1906 the receipts at said port were $135,922.75, and in the year 1905, $159,531.50, making a total for the three years of $457,812.50. This sum of money has

actually come out of the pockets of aliens applying at the said port during the three years. To what better use could a part of it be placed than the construction of a station equipped with all modern conveniences, including adequate hospital accommodations, for the large numbers that will apply for admission there during the years to come? The Bureau recommends that an appropriation of $250,000 be made for this object.

In Philadelphia, also, the service is handicapped by the lack of an immigrant station, to which need particular reference was made in the report for 1906 (p. 71). Every effort has been made to obtain proper accommodations without resorting to the expense of constructing a station, but without avail. The receipts at Philadelphia on account of head tax during the past three years amounted to $156,694; and the Bureau recommends that an appropriation of $250,000 be secured for use in the construction of a modern station at that port.

In Baltimore the Government has the use of a dock, furnished by the Baltimore and Ohio Railroad Company, for the landing of arriving aliens. Detention and hospital quarters are lacking, and the present arrangement is both cumbersome and inconvenient. The receipts at that port during the past three years aggregate $373,246. An appropriation of $250,000 should, in the Bureau's opinion, be made with the object of meeting the imperative demand for appropriate facilities for the handling of the heavy and rapidly increasing business of the port. (See also reference to report of Baltimore commissioner, p. 160.)

At its last session Congress took commendable action concerning the ports of New Orleans, Galveston, and Charleston, authorizing the construction of stations for the accommodation of arriving aliens and of the officers charged with the duty of examining them. The preliminary arrangements for the building of these stations are now in progress, and the Bureau anticipates that there will be no unreasonable delay in their construction and that they will be of much benefit to arriving aliens and a great convenience to the officers charged with the enforcement of the law. At these stations, however, the arrivals are insignificant as compared with the three cities above mentioned. The erection of those buildings has been authorized largely to meet an anticipated demand. In Boston, Philadelphia, and Baltimore the demand already exists.

Reports from San Francisco show that very gratifying progress is being made with the construction on Angel Island of a station for the accommodation of aliens, including Chinese. When this station is ready for occupancy the handling of the large business of the port will be simplified very greatly; and it is, of course, needless to say that in the ultimate the Government benefits, as a bare question of economy, from the use in its work of buildings that it owns and controls. The general advance in the cost of labor and materials and the occurrence of the earthquake of April, 1906, at San Francisco, make necessary an appropriation of $45,000 additional to the sum originally estimated for use in completing the building and appurtenances in accordance with the specifications. It will be necessary to either purchase or construct a steel ferryboat for service between Angel Island and the city of San Francisco, for which purpose the amount of $115,000 will be required; and a steel cutter for the use of the immigration officials in boarding incoming vessels, at a cost of

$25,000, will also have to be supplied. It is therefore recommended that such appropriations be requested.

Preparations have been made for the occupation at Seattle of a well-equipped and properly located station, into which the immigration officers will move on or about the 1st of August, 1907. The Bureau sustained a serious loss during the year by the death of William B. Estell, formerly immigrant inspector in charge of the Puget Sound district. In rearranging the administration of the law in that section, and in anticipation of the occupation in the near future of the new station at Seattle, the Puget Sound district was consolidated and the administration of both sets of laws placed under the officer who for some time had been Chinese inspector in charge of said district, Port Townsend being continued as a port of entry, but the headquarters of the consolidated district being placed at Seattle. This arrangement, it is believed, will be of much benefit in the handling of the ever-increasing business of that section, and the enforcement of the Chinese-exclusion laws from Seattle rather than from Port Townsend will be a convenience to all concerned. In speaking of the new building, the inspector in charge says:

There are many larger and more pretentious buildings occupied at different stations by members of our service than the one which we will have here, but I doubt very much if there is any of them which will suit the purpose for which it was originally intended better, or that is more conveniently arranged.

The building erected about two years ago for use as an immigrant station at Honolulu has proved to be a very satisfactory one. In one respect, however, it fails to meet the requirements, namely, in that it does not furnish separate and isolated quarters for the accommodation of aliens afflicted with contagious diseases not of a quarantinable nature; and the inspector in charge of that station recommends the erection on the grounds adjacent to the building of one or two small wooden structures that could be employed for the purpose indicated. This recommendation meets with the Bureau's approval, and it accordingly suggests that an appropriation of $5,000 be asked to cover the construction of the needed quarters.

8. Reports of Commissioners and Inspectors in Charge.

The limits to which a report of this character must be confined will not permit of the incorporation therein of the highly interesting accounts received from the various commissioners of immigration and immigration inspectors in charge throughout the country. A copy of the most important report—that of the commissioner at Ellis Island—is given, and a somewhat extensive extract from the report of the commissioner for Canada is also included, the former because its contents are, to a certain extent, typical of the work at the seaports, and the latter for the reason that it bears directly upon the Canadian border situation and indirectly upon a solution of the questions that confront the service on the Mexican border, as pointed out in subtitle 6 hereof.

The report of the commissioner of immigration for the port of New York is as follows:

A year ago it was my privilege to report to you what was then a record-breaking year; but as that year transcended in number of arrivals any preceding year, so this year surpasses last. This statement in itself will be quite sufficient to inform the

Bureau that Ellis Island has been run under unusual pressure during the entire fiscal year, the average monthly arrivals being 93,654. This monthly number equals the total annual arrivals in some of the past years, and when it is considered that each alien is given a separate and individual medical inspection, as well as an individual inspection by the immigrant inspectors, that 9,293 of them were detained in hospital for treatment, 64,510 for special inquiry by boards appointed to conduct special examinations, and 121,737 to be called for by relatives, it will be realized that it has been a task requiring unremitting attention to insure its proper accomplishment.

Ten thousand three hundred and sixty-two letters were received here during the year for arriving aliens from their friends and relatives. Telegrams received and answers to same sent numbered 13,180. Remittances to the number of 20,883 came to hand for aliens, aggregating $404,379.56, all of which was delivered to payees except $44,967.64, which was returned to the senders owing to the impracticability of its delivery.

Three thousand eight hundred and eighteen ships were boarded at quarantine by immigrant inspectors, at which point the inspection of cabin passengers is always commenced. The total number of aliens arriving by cabin was 143,120; and of this number 5,024 were detained for further investigation, 2,988 of them were held for special inquiry, 2,036 were temporarily detained, 4,736 were ultimately admitted, and 288 deported. There were detained here nightly throughout the year approximately 1,400 people.

Of the total alien arrivals (1,123,844) only 33,943 were 45 years of age and over, and 104,255 were under 14 years of age. There has been a noticeable increase in farm laborers and skilled laborers. In other respects the conditions are much the same as represented in previous years' returns.

The distribution of all arriving aliens has been as follows:

Alabama	1,436	Montana	2,581
Alaska	73	Nebraska	4,279
Arizona	1,298	Nevada	1,003
Arkansas	394	New Hampshire	3,900
California	22,673	New Jersey	68,627
Colorado	5,899	New Mexico	534
Connecticut	33,027	New York	364,544
Delaware	1,373	North Carolina	309
District of Columbia	1,311	North Dakota	2,817
Florida	1,177	Ohio	51,050
Georgia	601	Oklahoma	139
Hawaii	50	Oregon	2,300
Idaho	839	Pennsylvania	187,618
Illinois	79,136	Philippine Islands	11
Indiana	8,743	Porto Rico	84
Indian Territory	301	Rhode Island	6,159
Iowa	4,359	South Carolina	327
Kansas	2,552	South Dakota	1,785
Kentucky	576	Tennessee	646
Louisiana	1,227	Texas	1,058
Maine	1,642	Utah	2,492
Maryland	4,522	Vermont	2,012
Massachusetts	48,091	Virginia	1,816
Michigan	19,638	Washington	5,141
Minnesota	10,860	West Virginia	8,727
Mississippi	722	Wisconsin	15,878
Missouri	15,286	Wyoming	1,143

The State of California has received the largest increase. This is due, no doubt, to the rebuilding of San Francisco. As compared with 1906, when 12,448 passed through Ellis Island en route to California, 22,673 have passed through to the same destination this year.

The work of the law division at this station during the year in question is covered by the following table:

Actions brought during the year	48
Indictments obtained	27
Convictions secured, including pleas of guilty	17
Cases dismissed or discontinued	6

Judgments obtained for Government in civil actions	2
Writs of habeas corpus served on Commissioner (none of which were sustained)	25
Contracts drawn	75
Cases considered on Department warrant	840
Fines resulting from immigration court cases	$6,925.14
Fines imposed under section 9, act March 3, 1903	25,100.00
Fines imposed under section 15, act March 3, 1903	9,010.00
Total fines	41,035.14
Conviction secured in State court involving the rights of landed aliens	1

The following table will suffice to indicate the results of the work of the Public Health and Marine-Hospital Service during the year, as well as to afford comparisons with former years:

	1904	1905	1906	1907		1904	1905	1906	1907
Aliens certified for mental defects	62	146	286	355	Sent to Ellis Island hospital	3,953	4,828	4,913	5,940
Aliens treated in hospital	5,155	6,463	7,464	9,293	Certified	4,802	6,695	7,573	8,510
Sent to hospital for measles	333	608	1,081	1,333	Percentage of those certified deported	13	20	28	28
Sent to hospital for diphtheria	6	13	26	49	Total deaths	101	161	327	350
Sent to hospital for scarlet fever	35	31	91	131	Total births	10	10	18	14

This comparative table clearly shows that the increased number of doctors, for which I made request, has fully justified the action of the Bureau in complying therewith. The increased number of aliens certified for mental defects is especially noteworthy, but the most significant feature of the figures as a whole is the increased percentage of those actually deported. It is undeniably very important that all serious defects should be detected and duly certified, but it is also more important that the object for which the examination is held should be obtained—i. e., that all who are likely to be a burden on the public or to endanger the welfare of society should be deported. A moneyless alien who is mentally and physically sound is infinitely to be desired to one who, though well supplied with funds, is unfortunate enough to be mentally unbalanced or so physically unsound as to render him likely to become dependent on public charity. That our aim in this respect has been measurably successful the foregoing table of comparative figures will fully attest. A similar result is shown as to criminals, as per following statement of convicts deported:

1904	33	1906	200
1905	34	1907	319

The total number of deportations of all classes of aliens during the year ended June 30, 1907, from this station was 7,408, of which number 656 were deported on Secretary's warrant.

We have adhered strictly to the policy of last year of limiting the number of aliens to be received daily to 5,000, that being the maximum number that can be properly inspected during any one day. To receive more, with our present facilities, would certainly involve a departure from the strict method of inspection. I need only to repeat what I have stated in former reports relating to the facilities, and that is that their inadequacy is so obvious that none who pay any attention to the situation can fail to observe it. At the time the main buildings were constructed immigration had never reached 400,000 per annum, whereas in the year herein reported the total number examined is almost thrice 400,000. The last Congress authorized alterations which can not fail to give much relief; but, owing to the unprecedented pressure on the time of the Supervising Architect's office, final steps have not yet been taken toward consummating the plans thus authorized by Congress. This is to be regretted very much, because it is now feared that the authorized new buildings can not possibly be put under roof before bad weather ensues, thus making it impossible to make them available for the next spring season. During the months of March, April, May, and June every available bit of space at the entire station is in full demand, as the arrivals during the time referred to approximate 150,000 monthly. This requires many detained aliens to

sleep under conditions which we certainly can not defend, and which do not afford them that degree of comfort to which arriving aliens are entitled.

The steamship companies have continued to follow much the same course as has characterized their policy of former years, with the single exception of the increased attention they have given at ports of embarkation to persons afflicted with diseases that are liable to subject them to the payment of fines. That they have been thus vigilant is attested by the fact that of the total number of persons afflicted with contagious diseases only 251 were so afflicted as to enable the medical examiners to certify that said disease might have been detected at ports of embarkation, and this view is further supported by the total list of passengers rejected at ports of embarkation, which is in excess of 65,000. Two hundred and fifty-one cases out of more than a million of passengers—making due allowances for disagreements of diagnoses—certainly indicate that special attention has been given to this feature, and this emphasizes the wisdom of the act of March 3, 1903, which imposes a penalty of $100 for each case of contagious disease. I sincerely hope that the amplification of this feature of the law of 1903 in the law of February 20, 1907, will produce similar results in relation to aliens who are mentally unsound, such as idiots and imbeciles, and also epileptics. The more attention I give this matter the more I am convinced that this principle might be still further extended advantageously to this Government, and with increased protection to those who are permitted to make a useless and expensive journey across the ocean, and whose admission to the United States is absolutely precluded by law.

Of 9,374 aliens ordered deported during the past year by boards of special inquiry, 3,590 appealed from said decision with the following result:

Admitted on appeal	1,619	Appeals withdrawn	80
Admitted on bond	345	Appeals pending close of official year	77
Appeals dismissed	1,481		

It will be noted that 345 were admitted on bond, and although few, if any, aliens admitted on bond have ever fallen a charge on the public I repeat what I stated in my last annual report, that those aliens who are afflicted with mental degeneracy or with physical ills susceptible of reproduction in aggravated form ought never to be admitted under bond, no matter how strong the financial backing of the bondsmen. Financial security can not guard against ills of this nature.

This view can not be too strongly emphasized, for notwithstanding the fact that beginning with July 1, 1907, imbeciles, epileptics, etc., are not admissible even under bond, the number of admissions under bond is certain to be very greatly increased as per terms of section 26 of the act of February 20, 1907; and in this connection I feel constrained to suggest that every accepted bond ought to be entered of record in the county wherein the property specified in said bond is located, for there can be little doubt that it will become necessary to attempt to realize on some of the bonds, and I know of no better way to protect the people's interest than to take the necessary steps to make the bonds, accepted in their behalf, valid and enforcible.

It is a matter of regret that that portion of the act of February 20, 1907, relating to improved conditions on passenger ships was not made operative earlier than 1909. During the year just closed 1,506 children have been received at this station afflicted with measles, diphtheria, and scarlet fever, all of which diseases are due, more or less, to overcrowding and insanitary conditions. Of this number 205 died. Hospital treatment of these cases cost the steamship lines over $104,000, and the cost of detention of relatives while waiting for return from hospital of persons afflicted with the diseases in question has cost fully $30,000 more, and has placed a strain upon the dormitories and detention rooms at Ellis Island second only to the stress that is placed upon the steerage itself. This indicates a state of affairs which surely ought to be remedied before 1909, and I respectfully urge that such steps as may be deemed necessary to hasten the going into effect of this humane provision of law may be given the fullest consideration of the Bureau.

In addition to the requirement for dormitory and detention facilities here, I wish to repeat with emphasis my recommendation of last year for an additional ferryboat, for with the very large increase in arrivals there is a correspondingly increased demand made upon the facilities of the ferryboat. Indeed, I am persuaded that it will soon be necessary for the Bureau to provide a distinctly separate ferry service for baggage, freight, and supplies. Huge trucks of baggage are of necessity hauled on every trip of the ferryboat, which would in case of accident or emergency so greatly interfere with the possibility of the large crowds of people carried to and fro making their escape as to render it well-nigh impossible to avert a calamity which would simply be appalling. It is doubtful whether any ferry in New York Harbor is subjected to the strain of the Ellis Island ferryboat, and in calling attention to this matter again I am hopeful that Congress may be prevailed upon to provide us adequate transfer facilities.

Coincident with the increase of immigration a tendency to resume certain practices incident to the forwarding of admitted aliens to destinations, especially to remote or far distant places, became very noticeable and required considerable insistence to accomplish its discontinuance. The matter complained of related to the taking of aliens by circuitous and unnecessarily expensive routes. Our effort to establish a uniform practice in the matter of forwarding has been successful, and it is hoped no further departure from the accepted standard of comfort and cost will be attempted. It has also been duly noted that all the railroad companies have shown a desire to make up for the lowering of first-class passenger rates by increasing the immigrant passenger rates. This became so unjust that I made direct complaint to the head traffic officials of the principal offending railroads, but without securing any redress for those in whose behalf the complaints were made. I therefore, by and with your consent, filed a complaint with the Interstate Commerce Commission, and the progress thus far made indicates a very marked tendency to secure material improvements, not only as to the reduction of rates of travel, but in improved stations and coaches, and a material reduction of time consumed in forwarding.

Added to these betterments are the alterations, approved by the Bureau and now being rapidly pushed to completion, of the dormitories, detention and dining rooms at Ellis Island. When these changes have been fully made, the Government will have established a standard in the matter of treatment of immigrants conforming to the course indicated by enactments already secured and by proposed legislation.

It is worthy of special note that aliens who become public charges are not allowed to become permanent public burdens, as was the practice in former years. The following table shows that comparatively few of those expelled from the country on the warrants of the Secretary of Commerce and Labor had been in the United States more than one year. It is also interesting to note that those expelled bear a strikingly similar numerical relation to classes to which they belong; or, in other words, each nationality furnishes a quota of the expelled corresponding to its position in the column of arrivals. Aliens deported on Secretary's warrant during the year ended June 30, 1907, were as follows:

In United States less than one year	414
In United States less than two years	152
In United States less than three years	42
Total	608

The Bureau certainly ought to feel gratified over the personnel of its employees at this station. Notwithstanding the unusual demand made upon the time of the officials in every division and of every grade, most cheerful and uncomplaining devotion to duty has been the rule rather than the exception. The same may be said of the medical examiners, upon whom devolves a very responsible and trying duty—that of ascertaining the physical and mental condition of all applicants for admission through this port. That they have set aside from the regular line of inspection fully 25 per cent, or nearly 300,000 aliens, and have subjected them to the most critical and thorough examination, and of that number have certified 8,510 for disabilities of one kind or another, in addition to which they have relieved in the Ellis Island hospital 5,940 persons, is proof (without further comment) that nothing short of unremitting attention to duty could have accomplished the work devolving upon them.

The part of the report of the commissioner for Canada which is deemed of particular interest reads as follows:

In keeping with the trend of immigration to the ocean ports of the United States, immigration to Canada, both for the purpose of settlement in the Dominion and for transit to the United States, from the numerical standpoint has exceeded the record of any previous year. The Government of Canada which, during the past few years, has labored so assiduously to bring to the attention of subjects of other countries the claim that Canada affords a field for honest endeavor worthy the earnest consideration of those contemplating emigration, has abundant reason for gratification over the result of its immigration propaganda during the fiscal year just closed.

Through the courtesy of the Dominion immigration department it is shown that 148,514 immigrants having Canadian destinations arrived at Canadian Atlantic ports during the past year (an increase of 35 per cent over the year previous); 6,678 immigrants having Canadian destinations arrived at Canadian Pacific ports (an increase of 225 per cent over arrivals at the same ports for the fiscal year preceding); and added to the foregoing should be 28,646 immigrants entering Canada via United States ocean ports, and 56,088 who left the latter country to take up their homes in the great Canadian Northwest. The total immigration to Canada, therefore, for the year cov-

ered by this report, was 239,926, exceeding by 50,862 the number arriving in any one year previous.

* * * * * * *

The tables herewith submitted would tend to show improvement as to the number of immigrants reaching Canadian Atlantic ports who do not measure up to the required physical standard—the actual exclusions amounting to but .59 per cent of the total—but in order to reach correctness as regards the diseased, cognizance must be had of the fact that the Dominion immigration act makes hospital treatment permissible for all arriving immigrants afflicted with disease where recovery is probable, provided such unfortunates can meet the expense incident to such treatment.

It is therefore necessary, in order to show the exact proportion of undesirables brought to the eastern ports of Canada manifested to the United States, to add the number who underwent hospital treatment, thus augmenting the exclusions recorded to 1.41 per cent of the total number examined.

As compared with the record of recent years, however, this percentage of exclusions for disease shows a favorable trend which, it should be stated, is in no small measure due to the action of the management of the steamship lines with which the Bureau is in agreement, which management must be credited with progress in the matter of enforcing medical inspection of immigrants before embarkation.

The tables above mentioned contain other data, however, upon which I am prompted to feel the Bureau will not look with such satisfaction, reference being especially had to the unusual increase in the number of aliens who, originally giving Canadian destinations, proceeded to the United States within one year from date of arrival in Canada. From 9,724 during the fiscal year ended June 30, 1906, this class has increased to 15,677 for the year just closed. This remarkable increase is partially explained by the fact that while less than .60 per cent of those manifested to the United States at time of embarkation are excluded more than 10.06 per cent of the "one year in Canada" class find it impossible to meet the requirements of our laws when examined.

The record covering immigrants landing at Vancouver and Victoria must also be looked upon with apprehension. From steamships arriving at these two ports during the fiscal year 1906 there were manifested to the United States 2,823 immigrants of all classes. The record for 1907 shows a decrease of 444. That there was not only not a decrease, but that there was an unusual increase, in the number brought to these ports whose real destination was the United States is shown by the fact that during the fiscal year of 1906 there were but 2,253 who had previously effected a landing in Canada examined by our officers at Vancouver and Victoria, while during the year covered by this report 5,373 persons of this class were examined for admission to the United States.

By reference to the Bureau's monthly bulletins it is shown that the number of immigrants who sought admission to the United States from Victoria and Vancouver during the past year nearly equaled the total number examined at the important ports of San Francisco and Seattle, and what seems a matter for great concern is the showing from the record to the effect that a very large majority of the aliens applying for admission at the British Columbia ports were landed at those ports from steamships of lines operating between United States ports and the Orient, fully 50 per cent of such passengers being in possession of passports showing destination of the holders to be the United States.

Is it not well to look for the reasons why this immigrant traffic which should be brought to ports of the United States is deflected to ports of a foreign country?

In the first place the steamship lines interested escape payment of the head tax, which, under our laws, such lines are obligated to pay in respect of all alien passengers whom said lines may bring to the United States. The lines mentioned are also immune from fines which might be imposed for improper manifesting and bringing passengers contagiously diseased.

But I believe that the real incentive for landing alien passengers at Vancouver and Victoria is to be found in an inquiry as to the quality of immigrants landed at these ports from the steamships mentioned. The Bureau's records show that but 1½ per cent of the immigrants coming to Seattle are debarred, while at the ports of Vancouver and Victoria the exclusions are represented by 11 per cent of the total number examined, from which no other conclusion can be reached than that the steamship lines are bringing and landing at the ports of Vancouver and Victoria steerage immigrants whom they would not be so unwise as to attempt to land at Seattle or San Francisco.

If the debarring of these unfit classes by the boards of special inquiry at Vancouver and Victoria had no other outcome than the retention of such classes at the ports where they were granted landing, then the Bureau would have little cause for concern in the matter, but those debarred immediately put themselves in the hands of smug-

glers familiar with conditions along the Washington boundary, and unlawful entry to the United States is thereby often effected.

* * * * * * *

Continued experience in supervising the work of inspection in this jurisdiction is convincing as to the wisdom of the Department in arranging to control immigration through and from Canada by agreement with Canadian steamship and transportation lines. So mutually satisfactory have been the workings of such agreement that the new contract drawn to conform to the requirements of the act approved February 20, 1907, has been signed and approved by every important transportation company doing business across the Canadian boundary.

The construction of many new railway lines across the border in the extreme western end of this jurisdiction has greatly augmented the difficulties with which the Bureau's officers have to contend in handling the work of inspection, for in some instances ports of entry to the United States have been established in localities so entirely unsettled that officers find themselves called upon to perform the important duties devolving upon them with living accommodations that could not be considered worthy the name. In fact, it would not be difficult to show that there is but little of the Canadian border service to be identified with which does not carry its privations and hardships almost without number, yet owing to the highly important commercial and social relations existing between Canada and the United States I know of no other branch of the Bureau's service where a higher standard of efficiency is constantly demanded.

During the fiscal year to which this report alludes a total of 62,823 aliens requiring examination and manifesting under our laws were handled by the Canadian border force, but how inadequately do these figures bespeak the tact, judgment, courtesy, and general efficiency which must have characterized the work of our officers in selecting these aliens from eight millions of regular passengers who are known to have passed from Canada to the United States during the past fiscal year on social or business errands.

The commissioner of immigration for the port of Boston and subport of New Bedford calls attention to the statistics covering the work performed at said stations during the year, and reports a generally satisfactory situation as to the manner in which the officers assigned to his control have performed their duties in connection with the enforcement of the law. He also alludes to the difficulties under which inspection is made at the port of Boston, because of the fact that it is necessary for the officers to visit the arriving vessels instead of having the aliens brought to a centrally located station, furnishing an additional reason for the erection of a building for the reception and examination of aliens, which is recommended under the preceding subtitle of this report (p. 152).

The commissioner at Philadelphia, in summarizing the results of the year, furnishes a highly gratifying report, which shows conclusively that the enforcement of the law has progressed evenly and satisfactorily, and that the inspection of arriving aliens by both the immigration officers and the doctors of the Public Health and Marine-Hospital Service has been carefully and rigidly conducted.

A highly commendable and satisfactory condition is shown by the report of the commissioner at Baltimore. Notwithstanding the lack at that port of adequate and appropriate inspection and detention quarters for the large number of aliens arriving, careful and painstaking inspections have been made by the immigration and Public Health and Marine-Hospital officials, and the law has been enforced. He also describes convincingly the necessity for providing an immigrant station at Baltimore to take the place of the unsafe and unsatisfactory pier now being rented of the Baltimore and Ohio Railroad Company, action which is recommended in this report under the preceding subtitle (p. 153). The said pier has been condemned by the building inspector of Baltimore because of the absence of fire

protection, and is altogether unsuited for the proper handling of arriving immigrants.

That conditions affecting immigration to Porto Rico are constantly improving is shown by the annual report of the commissioner for that island. He states that the Porto Ricans are becoming more familiar with the letter and spirit of the law and more appreciative of its intent, and that the generally satisfactory social and commercial conditions are tending to produce a highly beneficial and desirable class of immigration. No difficulty nor friction has been encountered in enforcing the law.

The enforcement of the immigration laws at the port of San Francisco has been proceeded with quietly but efficiently during the past year, the chief difficulty encountered being the large influx of Japanese from Hawaii, which occurred prior to the passage of the new act and the issuance of the President's proclamation.

From the inspectors in charge at the various smaller ports, both on the seacoast and in the interior, the Bureau has received reports of a highly gratifying character. This is particularly true concerning the stations of New Orleans, Seattle, Honolulu, Chicago, St. Louis, and Helena.

9. Financial Statement.

Receipts and Expenditures on Account of the Immigrant Fund for the Fiscal Year July 1, 1906, to June 30, 1907, and Approximate Balance on Hand June 30, 1907.

Approximate balance June 30, 1906		$2,461,237.53
Receipts fiscal year 1907		2,782,103.68
Total		5,243,341.21
Expenditures fiscal year 1907		1,645,373.21
		3,597,968.00
For constructing a contagious-disease hospital on the proposed new island, Ellis Island, N. Y. (act approved March 3, 1905)—appropriation, $250,000; unexpended balance June 30, 1906, $249,994.75; expended fiscal year 1907.... Balance June 30, 1907, $133,492.15.	$116,502.60	
For constructing an immigration detention station on Angel Island, San Francisco Harbor (act approved March 3, 1905)—appropriation, $100,000; additional appropriation (act approved June 30, 1906), $100,000; total amount of appropriations, $200,000; unexpended balance June 30, 1906, $99,888.49; expended fiscal year 1907 Balance June 30, 1907, $182,088.07.	17,800.42	
For the enforcement of the Chinese-exclusion laws (act approved June 30, 1906)—appropriation, $500,000; expended fiscal year 1907 Balance June 30, 1907, $121,125.66.	378,874.34	
For two pavilions at Ellis Island, N. Y. (act approved December 19, 1906)—appropriation, $20,000; expended fiscal year 1907 Balance June 30, 1907, $14,724.62.	5,275.38	
Amount of special appropriations to be reimbursed from the "immigrant fund"		518,452.74
Approximate balance June 30, 1907		3,079,515.26

ITEMIZED STATEMENT OF RECEIPTS AND EXPENDITURES AT THE VARIOUS PORTS.

Port.	Receipts.	Apparent receipts.[a]	Expenditures.
Astoria, Oreg	$140.00		$89.85
Baltimore, Md	135,984.00		38,039.88
Boston, Mass	162,358.25	$1,330.56	78,570.26
Brownsville, Tex	126.00		7,110.17
Brunswick, Ga	100.00		1,857.15
Charleston, S. C	1,304.00		1,893.69
Corpus Christi, Tex	2,692.00		528.45
Eagle Pass, Tex	4,442.00		16,999.80
El Paso, Tex	8,012.00		22,072.96
Eureka, Cal	42.00		
Fernandina, Fla	76.00		2,096.26
Galveston, Tex	20,998.00		8,305.66
Gloucester, Mass	30.00		
Gulfport, Miss	1,266.00	10.00	2,339.06
Honolulu, Hawaii	50,999.60		21,758.20
Jacksonville, Fla	124.00		3,286.39
Juneau, Alaska	132.00		
Key West, Fla	5,480.00		2,953.15
Los Angeles, Cal	306.00		2,848.11
Marquette, Mich	134.00		
Miscellaneous		339.00	529,757.00
Mobile, Ala	1,218.00	3.50	4,110.51
Montreal, Canada	116,220.49	6.00	36,472.71
New Bedford, Mass	6,276.00		5,310.03
New Orleans, La	10,668.00	18.65	10,825.63
Newport News, Va	382.00		435.27
New York, N. Y	2,151,821.34	180,568.00	927,061.14
Nogales, Ariz	1,770.00		2,698.04
Norfolk, Va	290.00		6,511.51
Pensacola, Fla	916.00		1,804.19
Philadelphia, Pa	59,486.00		34,051.96
Port Arthur, Tex	98.00		2,514.10
Portland, Me	3,086.00		3,853.34
Portland, Oreg	988.00		3,323.54
Porto Rico	3,924.00		7,775.66
Port Townsend, Wash	11,168.00		8,766.44
San Diego, Cal	464.00		3,356.27
San Francisco, Cal	15,994.00		21,181.82
Savannah, Ga	534.00		1,656.02
Tampa, Fla	1,944.00		5,434.70
Wilmington, N. C	110.00		
	2,782,103.68	182,275.71	1,827,648.92
Less apparent receipts			182,275.71
Total	2,782,103.68		1,645,373.21

Appropriation for enforcement of the Chinese-exclusion laws, 1907 ..... $500,000.00
Disbursements on account of salaries and traveling expenses of inspectors, together with amount expended in the deportation of Chinese here in violation of law 378,874.34

[a] Apparent receipts represent amounts recovered on account of overpayments, disallowances made by the Auditor, and repayments to the appropriation from various sources.

From the foregoing statement it will be seen that, after payment of all expenses incident to the administration of the laws and regulations in regard to immigration and of the sum of $518,452.74 for the construction of a contagious-disease hospital and two pavilions at Ellis Island immigrant station, the construction of an immigration detention station, San Francisco Harbor, and the enforcement of the Chinese-exclusion laws, the net balance on hand is $3,079,515.26. This is an increase of $618,277.73 over the balance on hand at the corresponding period of last year. The total expenditures for the execution of the immigration laws at the various points named in the foregoing table, exclusive of payments from special appropriations referred to, were $1,645,373.21.

CHINESE DEPORTATIONS.

From the eastern Canadian border	9
From the western Canadian border	21
From the Mexican border	249
From other parts of the United States	47
Total	326

As will be seen from the following statement the total cost of making deportations was $35,959.17, an average cost of $110.30 for each Chinese person deported:

Expended for salaries and expenses of officers and miscellaneous items	$342,915.17
Expended for deportation of prisoners entering the United States from the Canadian border	5,037.78
Expended for deportation of prisoners entering the United States from the Mexican border	21,773.27
Expended for deportation of prisoners entering the United States from other points	9,148.12

NOTE.—Six Chinamen have been deported at an expense of $645.39, who are not included in the foregoing statement nor in the annual report for 1906, the expense of their deportation being payable from the appropriation for that fiscal year and they having been deported after the publication of said annual report.

The above financial statement is based on vouchers approved for payment covering expenses incurred during the fiscal year 1907.

II. CHINESE EXCLUSION.

1. IN GENERAL.

The treaty with China of November 17, 1880, placed this country in a position where, by the acquiescence and consent of the Government of that Empire, it could pass restrictive immigration laws applying particularly to persons of the Chinese race and having in view the exclusion from our shores of the Chinese coolie or laborer class—the class that all agreed constituted the menace to our welfare and peace which it was the desire of the Governments of both countries to abate. Then were passed the acts of Congress of May 6, 1882, and July 5, 1884, drawn to "execute certain treaty stipulations relating to Chinese," the first being largely experimental and intended by its terms to stand for ten years, and the second being amendatory, extending materially the scope and effect of the former, and based upon the experience derived from the efforts to enforce it; followed by the act of September 13, 1888 (the result of further experience), entitled "An act to prohibit the coming of Chinese laborers to the United States," by which were adopted stringent provisions of exclusion, and under the positive terms of which became fixed the policy, suggested by the commissioners who negotiated the original treaty, of regarding "officials, teachers, students, merchants, or travelers for pleasure or curiosity" as constituting the "exempt class" and all other "Chinese persons or persons of Chinese descent" as belonging to the excluded classes—a policy which has been followed ever since. Then came the act of May 5, 1892, reenacting and continuing in force for another ten years all existing laws, providing for the registration of Chinese then resident in the United States, and drawing the lines of exclusion still more strictly, supplemented by the amendatory registration act of November 3, 1893, and con-

firmed and further extended by the convention with China of December 8, 1894 (since expired); and finally the act of April 29, 1902 (amended by the act of April 27, 1904), was passed, reenacting, extending, and continuing in force indefinitely all laws "prohibiting and regulating the coming of Chinese persons and persons of Chinese descent into the United States, and the residence of such persons therein." This law was opposed before the committees of both Houses of Congress but was passed over all objection.

Even the most ardent opponents of the exclusion policy have generally professed a desire to have the coolie class prohibited from entering this country, directing their demurrer to the construction by which the treaty and laws are held to exclude all "Chinese persons or persons of Chinese descent" except those shown to belong to the "exempt classes." But under the existing treaty and laws this construction could not consistently and legally be changed; it is established, not only by a long-continued practice of the executive branch of the Government, but by a line of well-considered decisions of the judiciary, and has become as fixed as though written in the law in express terms. Under a careful, discreet, and discriminating system of enforcement which the Bureau has been able gradually to establish it has been possible to administer the law, so far as it contemplates the admission of those who apply at our ports and are found admissible, and the exclusion of those who so apply and are found inadmissible, with little or no complaint during the past year. But the point of most difficulty is encountered in another direction, and the Bureau confesses to some discouragement concerning it. Experience demonstrated that to make the exclusion laws effective of their purpose some measure must be adopted by which the expulsion of those laborers who enter without inspection, or who gain regular admittance by fraud and perjury, could be accomplished; hence the registration acts and the provision therein for the deportation of all Chinese laborers found in the country not in possession of the certificates of residence prescribed. This is the part of the law that is most bitterly opposed, especially in the interior and eastern districts of the United States. Yet upon its rigid enforcement depends any reasonable amount of success in the continuance of the exclusion policy; for so long as the Chinese laborers feel that, if they once become settled in a domicile here they will not be disturbed, just so long will they, in ever increasing numbers, find the means of evading the officers on our borders and effecting surreptitious entry into the United States.

Reference to Table 3 A (p. 173) will show that during the year 503 Chinese persons have been arrested, and that 336 were finally deported. It should be remarked, however, that even of these few arrests the vast majority, 453, were made in districts immediately on or closely connected by lines of travel with the Mexican and Canadian borders—principally the former. It has not been considered expedient to make arrests in the interior, and especially in the eastern section. Washington and Baltimore are perhaps typical of this condition. During the year not even one arrest has been made in said cities, although the Bureau ventures the opinion, upon the basis of the impression of its officers who make investigations of returning merchant and laborer cases, that there are in each *city at least* a hundred Chinese who have no lawful right to be

and remain in the United States. Just so long as public sentiment is such in these sections as to interfere with active operations in the making of arrests, just so long will the number of unlawfully resident Chinese continue to increase; and in the face of such a situation it is hardly consistent to continue to point to the good work being done at the regular ports of entry in preventing the landing of those not entitled; because for every one thus turned back several cross the borders, and the surreptitious and deceitful method of entering is thus placed at a premium. The only remedy for this lies in a general, aggressive resort to the provision of law relating to the expulsion from the country of Chinese who have no lawful right to remain; but the moment that is attempted a vigorous and extensive protest will be registered, as was done a few years ago when an effort was made to ascertain, quietly and unostentatiously, by means of a census, how many Chinese were residing in the various districts and the nature of the credentials held by each of them. The Chinese, particularly those of the unlawfully resident class, cultivate the friendship of their white neighbors, and there is apparently never any difficulty in enlisting hosts of influential citizens in their defense whenever a Government official indicates any intention to resort to a warrant of arrest.

Two measures, having in view, by their combined effect, an amelioration of this deplorable condition, were discussed in some detail in the annual report for 1906 (pp. 87–89), and are taken up again in another section hereof (pp. 177–180). The Bureau wishes here and now, after deep reflection upon the conditions already alluded to and an observation and study of the changes which are taking place in China and the awakening of the Chinese people to their own importance as a nation, to propound the inquiry, has not the time come for a complete revolutionizing of the exclusion policy—for changing the basis of the system, and attempting by some other means than those heretofore, and now, employed with comparatively little success, to accomplish the avowed object of the policy, viz, the exclusion of the laboring classes? In other words, has not the time come when this Government should attempt to negotiate a treaty with China by which that country will agree to keep at home her coolie class and the United States will agree to accord to all other classes the rights and privileges of subjects of the most favored nation? This is offered merely as a suggestion, but is one which the Bureau believes worthy of careful thought and consideration.

Whatever may be said concerning the scope of the exclusion policy, as gradually evolved by legislative enactment and executive and judicial construction—and the Bureau does not wish to be understood as disagreeing with the construction mentioned—there can be no gainsaying the assertion that the original intention of the inauguration of such policy was to effect a discontinuance of the immigration of the laboring or coolie class. This is the class on account of which all of the trouble and disturbance arose, being composed of persons who came into contact with American laboring men, affecting the labor conditions and the existing wage scale. Doubtless any system having in view and actually accomplishing the exclusion of said class would have been quite as acceptable to all concerned in this country as the system which gradually grew out of the treaty and acts above mentioned. Furthermore, while it was undoubtedly

true, prior to 1880, that the five sets of persons regarded as constituting the exempt classes, viz, officials, teachers, students, merchants, and travelers for pleasure or curiosity—especially in view of the wide scope of the last-named set—were sufficiently broad to include all persons of the Chinese race whom it was desirable, from the point of view of either China or the United States, to allow the full privilege of immigration; yet it must be remembered that since that time conditions have changed to a considerable extent in the United States and to a very great extent in China. The commercial relations between the two countries have expanded beyond measure. China has commenced at least to assume an important position among the nations of the world, and is but entering upon a period of what promises to be unexampled political, social, and commercial development. The Chinese Government has always asserted a desire to keep her coolie class at home; and as her resources are opened up, there should be more need than ever for the maintenance of this policy upon her part. On the other hand, considerable dissatisfaction is being indicated among the Chinese everywhere with the existence in this country of laws that they think are too broadly directed at the Chinese people as a race. Under these circumstances, is there not sufficient to be granted by way of mutual concession, to form the basis of a treaty, so plainly drawn and so comprehensive as to be effective of the desires of both countries, permitting of a more liberal attitude on the part of the United States toward the Chinese and at the same time affording an assurance that the coolie class will not be permitted to enter this country?

Whatever may be thought as to the desirability and feasibility of adopting a new treaty on this subject, in the Bureau's opinion one thing is certain, viz, that present conditions, some of which have already been alluded to and others of which will be mentioned hereinafter, can not be allowed to continue indefinitely with any credit to our Government. If the exclusion laws, as they now stand upon the statute books, are just and reasonable, they should be enforced in all of their provisions; if they are not just and reasonable and are not therefore to be enforced in detail, they should be repealed.

Difficulties of administration suggest themselves in contemplating so radical a change as that above suggested, but they could not well be more serious than those that arise in connection with the present system; and, at least, with a different treaty arrangement made between the two countries in good faith, affecting the migration thither of the coolie class, there would be a basis of mutual responsibility that could be appealed to upon all occasions. There would have to be of course a distinct understanding that passports would not be granted by the Chinese Government to members of the coolie class; and the treaty would also have to contemplate the adoption of a form of passport that would not lend itself to evasion and the perpetration of fraud. The question of the issuing of passports to members of the coolie class proceeding to foreign territory contiguous to the United States would also have to be covered, so as to prevent wholesale entries through such territory. It is realized that this suggestion is a wide departure from the position heretofore assumed on this subject. But during the four years since the Bureau gained complete control of the enforcement of the exclusion laws it

has been accumulating evidences of the failure of those laws, as drawn and enforced, to be actually and at all points effective of the purpose intended, at least not without serious objection and many complaints; and the suggestion as now put forth is the sum of those experiences.

The Bureau in its last report arranged the discussion of the enforcement of the Chinese-exclusion laws under certain natural and well-defined heads, and gave a description of each subject or class covered thereby, with the object of avoiding, so far as possible, repetition in future years of matter not strictly belonging to a record of the occurrences of the period covered by any particular report. Those natural divisions are again followed, taking up, first, the statistical tables showing the work of the year, and then in regular order the classes and divisions into which Chinese aliens and the conditions to be met concerning them naturally fall in the practical application of the law. Conciseness demands that repetitions shall be avoided. If, therefore, this classification is not clearly understood, reference should be had to preceding reports, particularly that for last year.

2. Statistical Tables.

The tables relating to Chinese are designated by Arabic numerals to readily distinguish them from those concerning immigration proper.

Table 1 shows by classes the total number of Chinese cases handled (at seaports and border ports, respectively) during the fiscal year 1907, dividing those totals into cases pending from last year and new applications, and indicating how many of each were finally admitted and deported, respectively, and how many remained unsettled. At the bottom of said table a further segregation is given, showing the distribution of the cases between the different seaports and border ports.

Referring to Table 1 in the report for 1906 (pp. 78–79), it will be seen that the total number of cases handled during that year was 3,015, hence the past year's total, 3,723, is 708 more. It will also be noticed that at San Francisco during the past year 470 more cases were handled than in 1906, so that more than half the entire gain occurred at that port, and there have been varying gains at several of the other ports, the most noticeable being Portal, Malone, Port Townsend, and Sumas.

With reference to classes, considerable gains are shown as to applications by alleged minor children of merchants and alleged natives, both of which classes, as pointed out under subtitles 5 and 9 hereof (pp. 175 and 180, respectively), are composed principally of laborers; and in the class of exempts, exclusive of domiciled merchants and their wives and children, there has been a reduction from 346 in 1906 to 295 in 1907, such reduction occurring principally in merchants and officials, the number of students having increased from 47 in 1906 to 129 in 1907.

TABLE 1.—CHINESE SEEKING ADMISSION TO THE UNITED STATES, FISCAL YEAR ENDED JUNE 30, 1907.

BORDER CASES.

Class.	Total cases.	New applications.	Pending from previous year.	Finally admitted.	Deported.	Pending close current year.
United States citizens	146	138	8	109	24	13
Wives of United States citizens	6	5	1	3	2	1
Returning laborers	169	169	.....	164	4	1
Returning merchants	196	185	11	176	15	5
Other merchants	40	40	.....	34	6	.....
Merchants' wives	17	17	.....	17	.....	.....
Merchants' children	148	145	3	117	25	6
Students	17	14	3	16	1	.....
Travelers	2	2	.....	2	.....	.....
Teachers	4	4	.....	4	.....	.....
Officials	1	1	.....	1	.....	.....
Miscellaneous	4	4	.....	4	.....	.....
Total	750	724	26	647	77	26

SEAPORT CASES.

United States citizens	953	925	33	820	53	85
Wives of United States citizens	26	20	6	20	6	.....
Returning laborers	624	623	1	601	15	8
Returning merchants	628	619	9	557	37	44
Other merchants	87	87	.....	78	9	.....
Merchants' wives	34	34	.....	34	.....	.....
Merchants' children	444	443	2	348	52	44
Students	113	113	.....	108	5	1
Travelers	9	8	1	8	1	.....
Teachers	3	3	.....	2	.....	.....
Officials	21	21	.....	21	.....	.....
Miscellaneous	18	18	.....	13	4	1
Total	2,973	2,921	52	2,608	182	183

TOTAL.

BY CLASSES.						
United States citizens	1,104	1,063	41	929	77	98
Wives of United States citizens	32	25	7	23	8	1
Returning laborers	793	792	1	765	19	9
Returning merchants	834	814	20	733	52	49
Other merchants	127	127	.....	112	15	.....
Merchants' wives	51	51	.....	51	.....	.....
Merchants' children	592	587	5	465	77	50
Students	129	126	3	122	6	1
Travelers	11	10	1	10	1	.....
Teachers	6	6	.....	6	.....	.....
Officials	22	22	.....	22	.....	.....
Miscellaneous	22	22	.....	17	4	1
Grand total	3,723	3,645	78	3,255	259	209
BY PORTS.						
San Francisco, Cal	2,478	2,436	42	2,150	152	176
Port Townsend, Wash	256	246	10	228	23	5
Honolulu, Hawaii	210	210	.....	206	2	2
Sumas, Wash	224	218	6	184	28	12
Portal, N. Dak	117	115	2	108	5	4
Malone, N. Y	280	275	5	253	21	6
Richford, Vt	121	108	13	97	20	4
Boston, Mass	4	4	.....	1	3	.....
New York, N. Y	23	23	.....	21	2	.....
New Orleans, La	1	1	.....	1	.....	.....
El Paso, Tex	8	8	.....	5	3	.....
San Diego, Cal	1	1	.....	1	.....	.....
Grand total	3,723	3,645	78	3,255	259	209
In transit overland	1,189	1,188	1	1,182	7	.....
In transit by water	1,117	1,097	20	1,037	3	77

Table 2 is a restatement of the figures of the preceding table, but arranged so as to show by whom the Chinese were admitted and rejected, respectively, and before whom unsettled cases are pending; the same segregation also being followed regarding the various ports. Of the 3,255 Chinese admitted, 3,195 were landed by the administrative officers at the ports and 60 by the Department on appeal. It will be noted that no cases are recorded in said table as being landed by the courts. This indicates that the 16 Chinese who appealed to the courts (by writ of habeas corpus) from rejections made by administrative officers were unsuccessful, the jurisdiction of the administrative officers being upheld. Deportation was effected in the cases of the 259 shown to have been rejected.

TABLE 2.—CHINESE SEEKING ADMISSION TO THE UNITED STATES, FISCAL YEAR ENDED JUNE 30, 1907.

BORDER CASES.

Class.	Admissions.			Rejections.			Cases pending.			Cases finally disposed of.	
	By inspectors.	By Department.	By courts.	By inspectors.	By Department.	By courts.	Before inspectors.	Before Department.	Before courts.	Admitted.	Deported.
United States citizens	96	13	....	34	16	5	9	4	1	109	24
Wives of United States citizens	1	2	....	5	1	....	....	....	1	3	2
Returning laborers	164	....	....	4	1	....	1	....	....	164	4
Returning merchants	171	5	....	22	6	....	2	3	....	176	15
Other merchants	34	....	....	7	5	....	....	....	....	34	6
Merchants' wives	17	....	....	....	....	....	....	....	....	17	....
Merchants' children	109	8	....	31	14	....	5	1	....	117	25
Students	16	....	....	2	1	....	....	....	....	16	1
Travelers	2	....	....	....	....	....	....	....	....	2	....
Teachers	4	....	....	....	....	....	....	....	....	4	....
Officials	1	....	....	....	....	....	....	....	....	1	....
Miscellaneous	4	....	....	....	....	....	....	....	....	4	....
Total	619	28	....	105	44	5	17	8	2	647	77

SEAPORT CASES.

United States citizens	812	8	....	62	26	6	59	11	15	820	53
Wives of United States citizens	20	....	....	....	....	5	....	....	....	20	6
Returning laborers	598	3	....	20	....	....	8	....	....	601	15
Returning merchants	554	3	....	31	8	....	42	2	....	557	37
Other merchants	78	....	....	9	2	....	....	....	....	78	9
Merchants' wives	33	1	....	1	....	....	....	....	....	34	....
Merchants' children	331	17	....	80	10	....	41	3	....	348	52
Students	106	....	....	4	....	....	1	....	....	106	5
Travelers	8	....	....	1	....	....	....	....	....	8	1
Teachers	2	....	....	....	....	....	....	....	....	2	....
Officials	21	....	....	....	....	....	....	....	....	21	....
Miscellaneous	13	....	....	6	1	....	1	....	....	13	4
Total	2,576	32	....	214	47	11	152	16	15	2,608	182

TABLE 2.—CHINESE SEEKING ADMISSION TO THE UNITED STATES, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

TOTAL.

Class.	Admissions.			Rejections.			Cases pending.			Cases finally disposed of.	
	By inspectors.	By Department.	By courts.	By inspectors.	By Department.	By courts.	Before inspectors.	Before Department.	Before courts.	Admitted.	Deported.
BY CLASSES.											
United States citizens	908	21	....	96	42	11	68	15	16	929	77
Wives of United States citizens	21	2	....	5	1	5	....	....	1	23	8
Returning laborers	762	3	....	24	1	....	9	....	....	765	19
Returning merchants	725	8	....	53	14	....	44	5	....	733	52
Other merchants	112	....	....	16	7	....	....	....	....	112	15
Merchants' wives	50	1	....	1	....	....	....	....	....	51	....
Merchants' children	440	25	....	111	24	....	46	4	....	465	77
Students	122	....	....	6	1	....	1	....	....	122	6
Travelers	10	....	....	1	....	....	....	....	....	10	1
Teachers	6	....	....	....	....	....	....	....	....	6	....
Officials	22	....	....	....	....	....	....	....	....	22	....
Miscellaneous	17	....	....	6	1	....	1	....	....	17	4
Grand total	3,195	60	....	319	91	16	169	24	17	3,255	259
BY PORTS.											
San Francisco, Cal	2,121	29	....	183	39	11	145	16	15	2,150	152
Port Townsend, Wash	227	1	....	20	7	....	5	....	....	228	23
Honolulu, Hawaii	205	1	....	5	....	....	2	....	....	206	2
Sumas, Wash	174	10	....	42	17	....	10	....	2	184	28
Portal, N. Dak	105	3	....	9	3	....	3	2	....	108	5
Malone, N. Y	244	9	....	27	16	5	....	6	....	253	21
Richford, Vt	95	2	....	20	8	....	4	....	....	97	20
Boston, Mass	1	....	....	3	....	....	....	....	....	1	3
New York, N. Y	20	1	....	3	1	....	....	....	....	21	2
New Orleans, La	1	....	....	....	....	....	....	....	....	1	....
El Paso, Tex	1	4	....	7	....	....	....	....	....	5	3
San Diego, Cal	1	....	....	....	....	....	....	....	....	1	....
Grand total	3,195	60	....	319	91	16	169	24	17	3,255	259
Section VI cases	240	....	....	20	2	....	1	....	....	240	19
In transit overland	1,182	....	....	7	....	....	....	....	....	1,182	7
In transit by water	1,037	....	....	3	....	....	77	....	....	1,037	3

SUMMARY.

Class.	Admitted.	Deported.	Class.	Admitted.	Deported.
United States citizens	929	77	Students	122	6
Wives of United States citizens	23	8	Travelers	10	1
Returning laborers	765	19	Teachers	6	....
Returning merchants	733	52	Officials	22	....
Other merchants	112	15	Miscellaneous	17	4
Members of merchants' families	516	77	Total	3,255	259

Of the 3,255 admitted, 2,398 were residents returning to the United States and 857 were new arrivals. Of the 259 deported, 144 claimed to be residents and 115 new arrivals.

Of the total admissions and deportations, there were admitted at San Francisco 2,150 and deported from that port 152.

Table 3, showing action taken in the cases of Chinese arrested on the charge of being in the United States in violation of law, is compiled from statements furnished by the United States marshals. Reference can be made, for comparison, to a similar table published in the annual report for 1906 (pp. 81–82). A curious circumstance is that exactly the same number of Chinese were arrested this year as last, viz, 503. It will be noted that of those so arrested, and those pending at the close of the previous year, 206, a total of 709, 11 died or escaped, 218 are still pending, 144 were discharged, and 336 were deported. During the past year, as in the year 1906, the majority of the arrests made were of Chinese who had surreptitiously crossed the land boundaries. Only a few were taken into custody at interior points, and there have been no special searches instituted for those unlawfully here. With the object of showing this with precision, an additional and more comprehensive table (3 A) is presented this year, from which it will be seen that of the 503 arrested during the year 453 were taken into custody in sections immediately contiguous to or directly connected by lines of travel with the land boundaries, showing that about 90 per cent of the Chinese so arrested were persons recently smuggled across such boundaries. The futility of expecting to prevent unlawful entries unless those who so enter and manage to reach the interior are taken into custody and deported, is shown at another part of this report (pp. 164 and 177).

TABLE 3.—ACTION TAKEN IN THE CASES OF CHINESE PERSONS ARRESTED ON THE CHARGE OF BEING IN THE UNITED STATES IN VIOLATION OF LAW, FISCAL YEAR ENDED JUNE 30, 1907.

Cases before United States commissioners.

Until order of deportation or discharge:		
Arrests		503
Pending before hearing at close of previous year		43
Total		546
Disposition:		
Died	2	
Discharged	120	
Pending before hearing at close of present year	75	
Ordered deported	349	
After order of deportation:		
Ordered deported		349
Awaiting deportation or appeal at close of previous year		44
Total		393
Disposition:		
Escaped	3	
Deported	303	
Awaiting deportation or appeal to United States district courts at close of present year	27	
Appealed to United States district courts	60	

TABLE 3.—ACTION TAKEN IN THE CASES OF CHINESE PERSONS ARRESTED ON THE CHARGE OF BEING IN THE UNITED STATES IN VIOLATION OF LAW, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

Cases before United States district courts.

Until order of deportation or discharge:		
Appealed to United States district courts		60
Pending before trial at close of previous year		78
Total		138
Disposition:		
Forfeited bail	2	
Discharged	20	
Pending before trial at close of present year	64	
Ordered deported	52	
After order of deportation:		
Ordered deported		52
Awaiting deportation or appeal to higher courts at close of previous year		3
Total		55
Disposition:		
Escaped	1	
Deported	19	
Awaiting deportation or appeal at close of present year	8	
Appealed to higher courts	27	

Cases before higher United States courts.

Until order of deportation or discharge:		
Appealed to higher United States courts		27
Pending before trial at close of previous year		37
Total		64
Disposition:		
Discharged	4	
Pending before trial at close of present year	44	
Ordered deported	16	
After order of deportation:		
Ordered deported		16
Awaiting deportation at close of previous year		1
Total		17
Disposition:		
Escaped	3	
Deported	14	

Recapitulation of all cases.

Arrests		503
Pending at close of previous year, including those awaiting deportation or appeal		206
Total		709
Disposition:		
Died, escaped, and forfeited bail	11	
Discharged	144	
Deported	336	
Pending at close of present year, including those awaiting deportation or appeal	218	

TABLE 3 A.—CHINESE ARRESTED AND DEPORTED, FISCAL YEAR ENDED JUNE 30, 1907, BY JUDICIAL DISTRICTS.

Judicial district.	Arrests.	Deportations.	Judicial district.	Arrests.	Deportations.
Massachusetts	1	.....	Wyoming	2	.....
Rhode Island	21	.....	Utah	1	.....
New York:			California:		
Northern	62	5	Northern	30	31
Southern	2	.....	Southern	105	77
Western	1	1	Colorado	1	.....
New Jersey	.....	1	New Mexico	57	62
Ohio:			Arizona	121	83
Northern	2	1	Oregon	4	8
Southern	1	.....	Alaska: First	1	.....
Indiana	.....	1	Hawaii	1	.....
Illinois: Northern	2	1	Tennessee: Middle	1	.....
Michigan: Eastern	2	3	Louisiana: Eastern	2	1
Minnesota	.....	1	Texas:		
Missouri: Eastern	8	4	Northern	6	4
Nebraska	2	.....	Southern	1	1
Montana	11	8	Western	44	27
Idaho	.....	2			
Washington:			Total	503	336
Eastern	.....	3			
Western	11	11			

Table 4 covers the travel to and from China during the year of registered Chinese laborers. This subject is treated fully in subtitle 6 of this title (p. 176), and needs no special comment here.

TABLE 4.—ARRIVAL AND DEPARTURE OF REGISTERED CHINESE LABORERS, FISCAL YEAR ENDED JUNE 30, 1907.

Port.	Departure of laborers.	Return of laborers.	Port.	Departure of laborers.	Return of laborers.
San Francisco, Cal.	428	424	Malone, N. Y.	115	77
Port Townsend, Wash.	106	57	Richford, Vt.	45	33
Honolulu, Hawaii	105	120			
Sumas, Wash.	68	22	Total	953	765
Portal, N. Dak.	86	32			

Table 5 shows, by ports, the number of Chinese cases in which appeals have been taken from excluding decisions rendered by officers in charge at ports of entry, and the action of the Department thereon.

TABLE 5.—APPEALS TO DEPARTMENT FROM EXCLUDING DECISIONS UNDER CHINESE-EXCLUSION LAWS, FISCAL YEAR ENDED JUNE 30, 1907.

Action taken.	San Francisco, Cal.	Port Townsend, Wash.	Honolulu, Hawaii.	Sumas, Wash.	Portal, N. Dak.	Malone, N. Y.	Richford, Vt.	Boston, Mass.	New York, N. Y.	El Paso, Tex.	Total.
Pending at close of previous year	4	1	....	1	1	2	2	....	....	....	11
Appealed	101	8	3	29	7	29	15	3	3	4	202
Total	105	9	3	30	8	31	17	3	3	4	213
Disposition:											
Sustained (admitted)	29	1	1	10	3	9	2	....	1	4	60
Dismissed (rejected)	39	7	....	17	3	16	8	....	1	....	91
Withdrawn or disposed of by means other than departmental decision	22	....	....	2	....	1	5	3	1	....	34
Pending at close of current year	15	1	2	1	2	5	2	....	....	....	28

3. "Section 6" Exempt Classes.

Under this title in last year's report (p. 83) the Bureau described with some particularity the evils which had existed in former years concerning the issuance and visé of certificates granted to supposed members of the exempt classes, and the good results accomplished by the action taken by the President in the spring of 1905, and the general understanding which had been effected between the officers of the consular service in China and the officers of the Immigration Service. During the past year, as in the preceding, the immigration officials at the ports of entry have been able to handle the cases of arriving "section 6" applicants expeditiously and with satisfaction to all concerned. Under the Bureau's instructions there has been no effort or apparent desire to draw any distinctions that are not definitely fixed by the terms of the existing laws; all arriving Chinese have been treated with the same courtesy that is extended to aliens of other nationalities; prompt examination has been accorded in each and every instance, and all properly authenticated cases have been disposed of with the minimum delay consistent with an identification of the applicants with the certificates carried by them.

Reference to Table 1 (p. 168) will show that during the year the applications of 127 merchants, 129 students, 11 travelers, 6 teachers, and 22 officials for admission were considered, making a total of 295 members of the exempt classes, of whom 272 were admitted, 22 rejected, and 1 is still pending. As shown by Table 2 (p. 169), of the above-enumerated exempt classes, 260 were section 6 cases, 240 of whom were admitted, 19 were rejected, and 1 is still pending. Of the 19 rejected, several were refused admission under the general immigration laws because found afflicted with a dangerous contagious disease. Others were rejected by reason of failure to properly identify themselves as the persons described in or entitled to the certificate required by section 6 of the act of July 5, 1884, which is the only evidence admissible in such cases. Several of those rejected were Chinamen who presented certificates issued during the time when fraudulent cases were the rule and genuine cases the exception.

The Bureau is still of opinion that a permanent, satisfactory solution of the problem presented by this class of cases must be sought in the arrangement which it has for some years advocated and which is described fully in the last annual report (p. 85), viz, by attaching to the consulates in China officers directly responsible to this Department, charged with the duty of conducting investigations concerning and viséing certificates granted to members of the exempt class. If the law is to continue as it at present appears upon the statute books, a measure should be adopted that will give absolute assurance that its terms are being observed, and the consular service should be relieved of the embarrassment which necessarily attaches to the present arrangement requiring officers charged with the promotion of commercial intercourse to perform duties that must often conflict with a line of conduct calculated to advance such commercial interests. It is, therefore, again urged that provision be made for an amendment to the law of the character described.

The Bureau has endeavored in all possible ways to cooperate with the Department of State and the consular service in China, with the object of improving the methods of investigating, viséing, and

reporting upon "section 6" certificates; and it believes that, by mutual effort, a system has been arranged that is as complete and perfect as is possible under the provisions of existing law. It, therefore, has no complaint to register, but on the contrary, is highly gratified with the improvement effected. Nevertheless, it believes, for the reasons reiterated above, that the system of dual responsibility now existing should be abandoned, and one adopted which would place in the hands of the branch of the executive department charged with the enforcement of these laws the entire responsibility for such enforcement.

4. The Domiciled Merchant.

Table 1 (p. 168) shows that during the year 733 merchants residing in the United States returned thereto and reentered the country after making temporary visits abroad. The evidence upon which this class of persons is readmitted to the United States is obtained in this country, and is therefore susceptible of a thorough examination and scrutiny on the part of the immigration officials before being accepted. Formerly, before the Chinese branch of the service was organized and controlled as at present, many violations of law occurred in connection with the so-called "domiciled merchants' certificates." These consisted of affidavits by two persons other than Chinese, attached to a sworn statement of the Chinaman bearing his photograph, and being to the effect that the witnesses had known him for more than a year as a merchant conducting business at a given address. Since the Bureau obtained complete control of the administration of the Chinese-exclusion laws, it has discovered that many of the Chinese laborers located in the country originally entered from China on papers of the said character sent them from this country. The perpetration of these frauds, however, has now been made impracticable, and about the only deceit encountered in connection with these cases arises from the desire of some laborer unlawfully resident here to pay a visit to his native land with the privilege of returning. Such a laborer will assume the rôle of a merchant and obtain the testimony of persons not unwilling to dispose of their name and oath for a consideration. As the practice is now becoming quite general to investigate these cases prior to the departure of the Chinaman, the frauds are usually detected in advance, whereupon the officer in charge of the district reports unfavorably, and the officer in charge of the port of intended departure refuses to indorse upon the applicant's papers a statement showing him entitled to reenter. Thus the fraudulent cases are gradually detected and a betterment of conditions effected.

5. Wives and Minor Children of Domiciled Merchants.

The Bureau can not add much to what it said in the report for 1906 (p. 86) regarding this class of Chinese. Every effort has been exerted at the various ports of entry to prevent the employment of the privilege accorded domiciled merchants of having their wives and minor children join them in this country for the purpose of violating the law, and the Bureau believes that its officers have been more successful in this respect than in the preceding year, so that it is reasonably sure that at least a number of the 51 "wives" and 465 "minor children," shown by Table 2 (p. 169) to have been admitted as members of this

class, were the actual wives and minor children of bona fide merchants, although many of the latter class of cases are by no means free from suspicion, and it is known that several of the "wives" actually became prostitutes.

One striking illustration of the facility with which the Chinese can obtain evidence required to effect their unlawful intentions arose in New York and Boston. A certain Chinaman resident in New York applied to the inspector in charge for an investigation of his claimed mercantile status, asserting a desire to have his wife and minor daughter come from China to live with him. Investigation showed that the man was not a merchant within the meaning of the law, but a laborer, and he was advised to that effect. He thereupon appealed to the Department and a reinvestigation of his case was conducted, resulting in an affirmation of the former findings of the officer in charge. A few months later the said Chinaman proceeded to Boston, having in the meantime had his wife and daughter come to the port of Richford, Vt., and filed with the commissioner of immigration at said port the evidence required by the statute to prove his mercantile status, claiming that for the preceding year he had been an active member of a certain Boston firm. A careful, searching inquiry was made concerning this claim, but no evidence tending to indicate its falsity was developed, the white witnesses answering all questions propounded in an entirely satisfactory manner. The evidence of the Chinaman's relationship to the woman and girl applying for admission at Richford being also satisfactory, they were admitted and proceeded with him to his place of residence in New York. The case is now in the hands of the Department of Justice for prosecution of all those implicated in the perpetration of the fraud, and it is hoped that a decision may be obtained which will have a salutary effect.

The Bureau renews the recommendation contained in last year's report (p. 86), that a provision be incorporated in the exclusion laws under which the minor children of domiciled members of the exempt classes may be admitted to the United States solely for the purpose of joining their parents or for engagement in other than laboring pursuits; the necessity for such a provision being further exemplified by the considerable increase in "minor children" admitted shown by Table 1 (p. 168).

6. The Domiciled Laborer.

It appears from Table 4 (p. 173) that during the year 953 laborers left this country for China, after having made preparations to be admitted upon returning, and that 765 such laborers were actually readmitted to the United States. The Bureau has not hesitated at every opportunity to state and to demonstrate that the provisions of sections 5, 6, and 7 of the act of September 13, 1888, prescribing the conditions under which domiciled laborers may reenter the United States after departure therefrom, are productive of no good results, are the cause of much embarrassment and expense in the administration of the law, and visit upon the Chinese affected thereby uncalled for and useless hardships. Much of the perjury and fraud, an investigation of which consumes the time of Chinese inspectors, arises in connection with this class of cases. In fact, if experience gained in the handling of hundreds of them year after year is to be relied upon,

many, if not a majority, of the claims set up under these provisions are wholly fictitious. The Bureau can see no reason why any Chinese person who is lawfully in the United States and who has in his possession a certificate evidencing the lawful character of such residence, should be required to do more than deposit his certificate upon leaving through a regular port of entry; he then to claim it upon his return at any future time, and, on being identified therewith, to have it restored to him and be allowed to resume his former domicile. The Bureau desires to emphatically reiterate its former recommendations on this point, for it is convinced that the dictates of both common sense and common justice demand that the requirements concerning this class of persons shall be placed upon a new and reasonable basis. (See also report for 1906, p. 86.)

7. Proposed Registration of Chinese.

The Bureau has stated in its reports for the past several years the necessity, if present conditions concerning the Chinese population of the country are to continue, for the inauguration of steps that will place in the hands of the large number of Chinese now in the United States incontrovertible evidence of their status, prepared in such form as to prevent its transfer or use for unlawful purposes. The registration certificates issued under the acts of 1892 and 1893 have never been satisfactory as a means of identification and proof. Many of those granted under the first act have no photographs attached, and are therefore readily transferable, and even those issued under both acts to which photographs were attached were often carelessly prepared, and are susceptible of being employed, and are employed extensively, as articles of barter and exchange. Besides which, so many counterfeits and forgeries have been uttered that the utmost caution is required at all times to prevent imposition and deceit. Moreover, it can not be denied that there is in this country to-day a number of thousands of Chinese who, if the truth could be ascertained concerning them, would be found to be unlawful residents. These laborers either have nothing in their possession evidencing their status or are supplied with fictitious or fraudulent papers of various kinds, of which they can avail themselves if placed under arrest to make a prima facie showing as to the manner of their entrance, the character of their employment during the registration period, or the place of their birth. To attempt the expulsion of this large element, or of even any considerable part of it, would be an undertaking of some magnitude and one which, in many sections of the country, would offend public sentiment. Yet existing law requires in emphatic and mandatory terms that they shall be arrested and deported.

The Bureau believes that it would be best, from every point of view, to make a new start on this subject by providing for the registration of all Chinese laborers now in the United States, supplying each one of them with a certificate practically indestructible and incapable of alteration; also extending the privilege to all Chinese of the exempt classes now resident here to provide themselves, if they so desire, with similar certificates as a permanent, incontrovertible record of their right to be here.

To make such a plan thoroughly effective there should also be a provision of law under which any Chinese laborer, found so engaged

in the United States after the expiration of a year from the date of the registration act, might be taken into custody by immigration officials on a warrant issued by the Department, and, after hearing before administrative officers, with the right of appeal to the Department, and a finding to the effect that he is a laborer without the certificate required by law, be deported under departmental warrant, just as aliens of all other races are now arrested and deported if unlawfully in the United States. As will be seen by reference to Table III (p. 82), 995 aliens of other races were thus arrested and deported during the past fiscal year. This has been effected without any cause for complaint, and a similar arrangement regarding Chinese should work as satisfactorily.

8. Proposed Issuance of Certificates of Identification to Admitted Members of the Exempt Classes.

In the enforcement of the exclusion laws as they now stand upon the statute books it is absolutely necessary that the Chinese inspectors, especially those stationed along or in the vicinity of the land boundaries, shall require Chinese persons found traveling on trains or boats to give some satisfactory account of their presence within United States territory and to furnish some assurance that they are lawfully therein; otherwise all Chinese who succeeded in once passing the boundary line would be able to proceed to some one of the large inland cities and become practically lost to Government observation among the other Chinese residing there. Some complaint has arisen on occasions in the past because the officers charged with the enforcement of the laws have accosted Chinamen who were members of the exempt classes and occasioned them some annoyance by reason of their inability to promptly furnish evidence in substantiation of their claim. Soon after assuming direct and complete control of the administration of these laws the Bureau became convinced that some measure must be adopted to obviate this serious difficulty. In drawing revised regulations in the spring of 1905, therefore, the Bureau prepared what became known as "Rule 59," having in view the accomplishment of the above-mentioned object. Although said rule was adopted and was published in the pamphlet entitled "Treaty Laws and Regulations Relating to Exclusion of Chinese, May, 1905," it was never actually put into effect, and the form of certificate contemplated thereby was never printed. The Bureau regards this matter as of such prime importance that it inserts a copy of the rule mentioned, slightly modified, and again urges that either that or some similar provision shall be adopted for the protection of the Chinese lawfully admitted to the country and the relief of the immigration officials from a constantly recurring embarrassing situation. (For additional reasons for the adoption of such a measure, see annual report for 1906, p. 88.)

Rule 59. (*a*) With a view to affording a proper and efficient means of identification to Chinese persons, or persons of Chinese descent, admitted to the United States upon proof of their status as members of the classes specifically exempted from the excluding provisions of the Chinese-exclusion laws, viz, merchants (domiciled or foreign), teachers, students, and travelers for curiosity or pleasure, a certificate of identity, of which the following is a copy, will hereafter be issued by the officer in charge at the port of entry to each such person admitted or readmitted to this country by him who may apply for the same; the instructions hereinafter given to be carefully observed

in issuing such certificates: *Provided*, That only one such certificate shall be issued to any one Chinese person, except that duplicates may be furnished of those unavoidably lost or destroyed under the terms of paragraph (*h*) of this rule, the method to be followed with a view to preventing a violation of this proviso being described in paragraph (*i*) hereof.

(*b*)

[FACE.]

No. ——. [Original.]

UNITED STATES OF AMERICA.

Certificate showing lawful admission—Issued in conformity with a regulation of the Department of Commerce and Labor.

This is to certify that ——— ———, a Chinese person, or person of Chinese descent, belonging to one of the classes specifically exempted from the excluding provisions of the Chinese-exclusion laws, has this day been admitted by me, satisfactory proof having been submitted and placed on file showing —— to be a ——— ———.

This certificate is not transferable, and is granted solely for the identification and protection of said Chinese person so long as —— status remains unchanged; to insure the attainment of which object an accurate description of said person is written on the reverse side hereof, and photographic likenesses showing full face and profile of said person are attached, with —— name written partly across, the number above given perforated through the edge of, and my official seal impressed partly over, each of said photographs.

[BACK.]

Description.

[Name.]

[Perforation.]

Photograph. (Full face.)

[SEAL.]

Name: ——— ———. Age: ——.
Occupation: ———.
Local residence: ———.
Height: — ft. — in.
Physical marks and peculiarities: ____

———— ————,
Officer in Charge.

Port of ———,
———— —, 19—.

[Name.]

Photograph. (Profile.)

[Perforation.]

[SEAL.]

(*c*) The certificates are printed from engraved plates, numbered consecutively, and bound in books containing 50 each, an original, a duplicate, and a triplicate of each number being furnished, arranged the latter two above the former for convenience in copying from one to the other, and perforated to permit of easy detachment from the book and from each other.

(*d*) In issuing said certificates care will be exercised to have the original and the duplicate correspond in every detail. All blank spaces remaining after writing in the data required to complete the identification of the person to whom the certificate is issued will be covered by ruled lines, so as to prevent the insertion of any additional word or words without detection. When placing the impression of the seal upon the certificate the three copies will be inserted in the seal at once; and in perforating the margin of the photographs, such perforation will be made simultaneously, so that if necessary at any subsequent time to verify the original certificate by comparison with the duplicate or triplicate, placing one immediately over the other will cause the perforated numbers to exactly match. Care will be exercised to have the perforations pass through the edge of the photograph without touching the face or other portion of the subject of the photograph. The copy of certificate herein given has been so printed as to furnish an illustration of the manner in which such certificate should be prepared.

(*e*) The certificate being issued as an accommodation to Chinese persons, any person applying therefor will be required to furnish six photographs of himself (three showing full face and three profile view). The height will be carefully taken and inserted in feet and inches, and in recording physical marks and peculiarities all those which

are the most prominent and the least likely to be obliterated by lapse of time should be selected.

(*f*) These certificates, as shown on their face, are issued for the protection and identification of Chinese of the exempt classes *only so long as such persons shall retain their exempt status*. Therefore, when such a certificate is found by an inspector in the possession of a person engaged in the performance of manual labor, or of a person to whom it does not relate, as shown by a comparison of such person with the photograph and personal description appearing thereon, it should be taken up and forwarded to the Bureau of Immigration, Department of Commerce and Labor, for cancellation.

(*g*) The duplicates of the certificates will be forwarded to the Bureau of Immigration immediately upon the issuance of the originals, in order that such duplicates may be safely filed for future reference, and the triplicates will be retained on the files of the officer in charge.

(*h*) If such a certificate of identification shall be unavoidably lost or destroyed at any time, a certificate in lieu thereof will be issued by the officer of the Bureau of Immigration designated to issue duplicates of laborers' registration certificates, upon the applicant's furnishing to the Commissioner-General of Immigration satisfactory proof of the unavoidable loss or destruction of such certificate and of his identity as the person to whom it was originally issued.

(*i*) With a view to preventing the issuance of more than one certificate of identity to any one Chinese person of the exempt classes, officers in charge at ports of entry will render to each of the other officers in charge at such ports quarterly reports, giving the names and descriptions of all persons to whom such certificates have been issued, such reports to be typewritten on blanks furnished for that purpose.

9. The "Native Born."

The fact that the Chinese who advance the claim of birth in the United States as a reason to excuse their presence here or to procure admission at the seaports and on the land boundaries are almost invariably members of the laborer or coolie class makes the figures presented from year to year regarding decisions rendered on such claims particularly interesting to those who believe in the exclusion from this country of the coolie. From Table 2 (p. 170) it will be seen that during the year 929 Chinese have been admitted by administrative officers as American citizens by birth, and reference to Table 3 (p. 171) will show that the courts have discharged 144 persons of the Chinese race, the most of whom had claimed when placed on trial that they were citizens of this country. The "native-born" class falls into two divisions—first, the returning native, i. e., a person of the Chinese race who, after a residence of some years in the United States, visits China, usually with the object of being married, and returning from such visit applies for readmission, to which division belong the majority of the 929 cases shown by Table 2 to have been admitted by administrative officers during the year; and second, the "raw native," i. e., a Chinaman who, without possessing any evidence of a residence in this country, seeks to enter or to be allowed to remain here on the claim that from twenty to thirty years ago (for the most of them range between those ages) he was born in the United States, California usually being stated as the exact locality, and that in early infancy he was carried or sent by his parents to China. In past years hundreds of Chinese were constantly being declared natives by the courts, especially in districts contiguous to our land boundaries.

There has been a marked improvement in this respect, as was pointed out in the report for last year (p. 90). It is a well-known fact, and capable of easy demonstration, that the number of Chinese who have already claimed birth in the United States is a large *multiple* of the number of children that, as a physical possibility,

could ever possibly have been born of the entire female Chinese population of the United States since the first Chinese woman landed on the Pacific coast. A curious circumstance in this connection is the fact that almost invariably a Chinaman asserting the claim of American birth states that he is the only child of his alleged parents. It is true that the second division of this class, above mentioned, presents a more serious phase of the subject than does the first; but it is also true, as already stated, that the vast majority of these claimants of both descriptions are ordinary coolies and, moreover, it must be remembered that the moment a person of the Chinese race is invested with American citizenship he acquires all the privileges that the term implies, among others the right to bring his wife and children to this country—and therein lies the chief danger. The Bureau's attitude, and that of its officers, during the past year, as heretofore, has been to accord a fair opportunity to claimants of this character to establish their claims, but to examine critically the evidence offered and to admit a Chinese person as an American citizen only upon the submission of such proof as would, under all of the circumstances of the case, satisfy a reasonable mind of the truth of the assertions made. The very nature of the cases requires that the burden of proof shall be upon the applicant, and the Bureau does not believe that any less exacting rule of evidence can safely be observed. The experience of the year has produced nothing that would justify the least modification of the Bureau's comments of last year on this subject, to which attention is directed. (Annual report, 1906, p. 90.) With regard to the cases of some of the Chinese women admitted during 1906 as the "wives" of Chinese-American citizens, it has been found that they were, almost immediately after entry, sold at from $3,000 to $4,000 apiece and placed in houses of ill fame—thus verifying the suspicions entertained at the time of their examination.

Reference to Tables 1 and 2 (pp. 168 and 169) and to the preceding remarks contained in this subtitle can not fail to attract the attention of the thoughtful reader to the serious nature of the problem presented by the so-called "native-born" Chinese cases in their various features. And the problem is one which multiplies as the years pass. It requires some system of treatment not heretofore evolved nor authorized by Congress. There is no gainsaying the fact, established by the observation of all officers, both administrative and judicial, who have come into close contact with the enforcement of the exclusion laws, that, upon questions affecting the admissibility to this country of Chinese, the testimony of persons of that race is almost universally unreliable. No matter how trustworthy and honorable a Chinese merchant or laborer may be in the conduct of his daily business, he seems to have no compunction whatever in practicing deceit concerning matters in which the Government is interested. There is no statutory rule of evidence, however, under which, in determining the claims of alleged natives, the Government can require the testimony of persons other than Chinese. The perpetration of frauds, which a few years ago were extensive, along the Canadian border has decreased materially because of the effect upon Chinese immigration through Canada of the $500 head tax assessed by that country. Despite this discouragement, however, 53 Chinese have been declared American citizens in the northern district of New York, which has always been the most important district on that border. These cases

were so carefully prearranged and coached that the Bureau is satisfied the court commissioners were placed in the position where, although in a number of instances they were doubtless morally satisfied of the fraudulent character of the claims, they could find no ground upon which to reject the consistent Chinese testimony and order the deportation of the defendants.

In the past few years the Department has not been confronted with a great number of the "raw native" cases, an Executive decision to the effect that a Chinese person who claimed to have been born in this country, to have been taken to China in early infancy by his parents, and to have remained in China until after reaching his majority had in effect expatriated himself or been expatriated by his parents, and was not, therefore, entitled to be regarded as an American citizen under the terms of the decision of the Supreme Court in the Wong Kin Ark case (169 U. S., 649), having produced a far-reaching effect in discouraging the migration hither of Chinese of the said class. By an act of Congress passed on March 2 last it has been provided that a person born within the United States can expatriate himself only by taking some such affirmative step as to become naturalized in or swear allegiance to a foreign country, and the Bureau anticipates (and its anticipations are already being realized to some extent) that the Chinese will be quick to seize upon this opportunity and a large number of fraudulent cases will be the result. For all of these reasons it urges that legislative action may be had which will fix, as definitely as possible, a rule of evidence to apply to the cases of alleged natives, requiring that they shall make a satisfactory showing concerning the claim of birth in the United States, either by record evidence or by the testimony of white persons, or by both, in addition to any Chinese testimony presented.

10. The Transit.

Early in the administration of the Chinese-exclusion laws it was found that the coolies who came to United States ports ostensibly en route to other countries required the closest watching. It soon became obvious that many of those who thus sought to enter foreign territory did so with the ulterior motive of eventually crossing the border into the United States. It therefore became necessary to adopt regulations governing this transit privilege, which regulations were afterwards approved by the Supreme Court of the United States in connection with the decision of a Chinese case. It will be seen by reference to Table 1 (p. 168) that 2,219 Chinese have passed through the United States in transit to other countries during the past year. That many of these, especially of such as proceeded to Mexico, have already or will eventually attempt to enter the United States is not doubted, for, as is shown under subtitle 12 hereof (p. 183), Chinese do not usually go to the Republic of Mexico for any other purpose.

11. The Chinese Seaman.

During the past year it has been necessary for the immigration officials to guard against the landing in this country of over 21,000 Chinese seamen. The situation concerning this class of persons is even more serious than that affecting alien seamen in general, alluded

to particularly under subtitle 1 of Title I hereof (p. 131). It is true that the law provides a penalty against any master who allows a Chinaman to escape into the United States, but it is also true that, as the law now stands and in the light of various court decisions, it is not an easy matter to obtain a conviction in such a case. The Bureau repeats the recommendation on this subject contained in its report for 1906 (p. 93), that the law should be so amended as to attach a definitely fixed severe penalty to the permitting of a landing, even though there is no actual connivance on the part of the master, and a more severe penalty when such connivance is shown.

Attention is also directed to the comments made in last year's report (p. 93) regarding the importance to an enforcement of both the Chinese-exclusion and the alien contract-labor laws of the adoption of some legislation that will definitely settle how the deck of a vessel of American register is to be regarded when applying said laws, i. e., whether such deck shall be considered American soil and the importation of Chinese or other alien crews for employment thereon prohibited. As the matter now stands, the practice has grown up of regarding such a vessel as American soil when any Chinese or other alien resident in this country is engaged thereon, but to regard it as foreign territory when Chinese or other aliens are shipped as sailors thereon at a foreign port, a construction which deprives the American seaman of the measure of protection afforded laborers engaged in other than seafaring pursuits.

12. Canadian and Mexican Border Conditions.

There has been no change in the highly satisfactory manner in which the agreement with the Canadian Pacific Railway officials concerning the handling of Chinese passengers along our northern border is being observed, nor in the results thereby attained, mentioned in the last annual report (p. 92). On the Canada-New York border 75 Chinese were arrested and tried after having surreptitiously crossed into the United States (13 of said cases having been pending from the preceding year), of whom 53 were released by the court commissioners as American citizens, 10 being deported, and 12 cases remaining unsettled at the close of the year. While, as compared with the wholesale entries formerly effected in that always important locality in the introduction of Chinese, this is an insignificant number, it is annoying that neither the origin of the Chinese nor the manner in which they effect a landing in Canada can be discovered with certainty. The Bureau is assured that every possible effort is made to break down the testimony given by these alleged citizens and the Chinese witnesses who appear in their behalf. Apparently the methods of coaching adopted are complete in every detail, and doubtless an occasional case of this kind is not fictitious but is actually an instance of birth in the United States. At any rate the United States commissioner usually finds himself in a position, after all the testimony has been taken, where, on the preponderance of the evidence, he can do nothing but pronounce the defendant an American citizen by birth; and yet everyone concerned may be, and probably is, morally certain that the evidence has been made to order.

So long as Chinese can manage to cross our border in accordance with prearranged and well-coached plans, this evil will continue to

exist to some extent; and no time, money, or pains are spared to insure their remaining after they have crossed. In fact, the Chinaman prefers this method of entry to any other; for, having once been tried and discharged as an American citizen, not only is his future residence here assured, but he can, whenever he chooses, bring in his wife or children. These evasions of the law on the Canadian border are serious enough, but when compared with those on the Mexican border they sink almost into insignificance. If the Bureau could feel sure that there was a fair chance to bring the conditions on the Mexican into anything like the shape existing on the Canadian line, it would indeed be encouraged; for on the latter it at least is able to judge with some degree of certainty what has to be met and where energies need to be most exerted, while so far on the Mexican line it is a matter largely of guesswork. By way of emphasizing what has been said in former reports regarding the difficulties encountered on the Mexican border, and the unavailing, although strenuous and conscientious, efforts there made to enforce the exclusion laws, the following extracts from two reports submitted during the past year by Inspector Marcus Braun, detailed to Mexico on special investigations, are given. These reports furnish reasons, additional to those already pointed out under subtitle 6 of Title I (p. 145), why some understanding should be had with the Government of Mexico which will make possible a more effective control of immigration through that Republic.

NEW YORK, N. Y., *February 12, 1907.*

* * * The Chinese laborers arrive at the three Mexican Pacific ports—Salina Cruz, Manzanillo, and Mazatlan. They come to Mexico with no intention to remain, but because they think they can enter the United States in an easy way. They seem to be right, for there are but few Chinese laborers in the various Mexican States. * * * On their arrival in Mexico, I found them to be provided with United States money, not Mexican coins; they had in their possession Chinese-English dictionaries; I found them in possession of Chinese-American newspapers and of American railroad maps. I found that they cut their pigtails and exchange their blue jeans and their felt slippers to the most picturesque Mexican dress; that they learn to say "Yo soy Mexicano" ("I am a Mexican"), in case they should be held up by some American citizen while attempting to cross at a distant point from an immigrant station.

* * * * * * *

On January 2, 1907, there arrived at Salina Cruz the steamship *Alabama*, of the Chinese Commercial Steamship Company, with 450 Chinese on board. They came from Hongkong and were in charge of one Jose Chang, a sort of padrone, living in Guaymas. After being held in quarantine for two weeks they were allowed to land. About 300 of them were sent to Torreon, allegedly to pick cotton; the balance took the steamer *Manuel Herrerias* for Guaymas, from where they were to be sent north, to be employed on some railroad near the Arizona border line. I took the same steamer. I had become fairly well acquainted with Jose Chang, and he told me "his people" were going to the State of Sonora, near the American frontier. When our steamer dropped anchor at Mazatlan, a Chinese delegation came on board of the vessel and after an hour's confab about 50 of the 150, although they had paid their passage or had it paid for them to Guaymas, abandoned their trip and took the American steamer *Curaçao*, which sailed that day from Mazatlan to San Francisco, stopping en route also at Ensenada, in Lower California, a few miles this side of San Diego, the American-Mexican border city.

* * * * * * *

At Guaymas I visited the business place of Jose Chang and I saw there probably 200 letters from the United States being distributed among the newly arrived Chinese immigrants. I took, next day, the train for Nogales, Ariz., and almost all of the 100 Chinese who were to work on the railroad I found to be on the train with railroad tickets for Magdalena, a small Mexican settlement near the Arizona border line.

The United States maintains, I think, about nine examining stations along the Mexican border, and every point where railroads cross the line is, as far as I know,

fully covered. There are, however, rowboats, if perchance there is enough water in the Rio Grande to make it necessary to take a boat; there are carriage roads, pathways, highways, mountain trails; there is a broad expanse of land with an imaginary line, all passable, all being used, all leading into the United States. Of course, the vigilance of your officers stationed along the border is always keen; but what can a handful of people do? It is a deplorable condition of affairs; we seem to be compelled to bear it; the Chinese do come in from Mexico.

* * * * * * *

I base my conclusions [regarding the number of Chinese coming into Mexico] upon the data about arrivals in Mexico that I could secure, and upon interviews which I had with responsible business men on both sides of the border line. There is, for instance, Mr. W. Iberry, the head of one of the largest banking concerns in Guaymas, Sonora, who told me that within the last few years probably 20,000 Chinese had come into the State of Sonora, and he was willing to wager any man that not 4,000 of them could be found there now. Mr. Iberry told me that near the border line there were quite a number of Mexicans who make a living by guiding and carrying Chinese and other aliens into the United States.

The quartermaster of the American steamer *Curaçao*, one Lange, who served in the American Navy, told me that every trip the ship makes they have from 50 to 100 Chinamen on board bound for Ensenada, Lower California, and that it is openly admitted by their friends who bring them on board that they go to the United States. In fact, Mr. Lange said that there is no possible chance for these Chinamen to make a living in Ensenada or vicinity, and that they are compelled to go farther north across the border line into southern California. Similar information I received wherever I went in Mexico, and particularly in the cities near the border line—Monterey, at Chihuahua, at Durango, Torreon, and also at the City of Mexico. * * *

EL PASO, TEX., *April 4, 1907.*

* * * The situation in Guaymas with reference to Chinese arriving there for the purpose of smuggling themselves or being smuggled into the United States is quite an open secret. Every steamer arriving at the port of Guaymas, either from South American, Central American, or southern Mexican Pacific ports, brings from 50 to 250 Chinamen, and I do not think it is necessary to go into this question further, because it was very exhaustively treated in my report of February 12.

* * * * * * *

Ciudad Juarez, across the Rio Grande from El Paso, Tex., is at any time inhabited by from 250 to 500 Chinese, and while the trains coming up from the interior of Mexico via the Mexican Central Railroad, as well as the trains of the Sierra Madre road coming from Casas Grandes and farther west from Sonora, bring every day from 20 to 50 Chinamen, the number of Chinese in Ciudad Juarez never increases, but, on the contrary, very often decreases to just one-third of their usual number, and most diligent research has failed to show that any Chinamen ever leave that town for the interior or the western part of the Mexican Republic. Consequently, this may be accepted as good circumstantial evidence that the Chinamen coming to Ciudad Juarez either vanish in thin air or cross the border line. But there is other very strong circumstantial evidence to prove that they cross the border line. For a number of years it has been the custom in the jurisdiction of the inspector in charge of this station to keep a very keen watch of every incoming and outgoing train to El Paso. Any Chinaman who comes by train to El Paso must show his paper to the officer stationed there, and if he is not in possession of a valid paper he is arrested. The same procedure is observed with reference to Chinamen who wish to leave El Paso by train. In addition thereto, they have to present themselves at the immigrant station prior to their taking the train and have their paper stamped and validated by the inspector in charge. No Chinaman can leave El Paso without presenting to the officer stationed at the railway stations such validated and indorsed paper.

Since July 1, 1906, up to this time, 250 Chinamen, most of whom were in possession of genuine certificates, presented themselves at this station and had their papers indorsed for the purpose of facilitating their intended trip to interior points of the United States, but only a very insignificant number of them, if any at all, were ever seen by any of the inspectors who watch the incoming trains arriving here; and the conclusion is irresistible that these men had been out of the country * * * and simply had themselves smuggled over the border at this particular station, full well knowing that if arrested they would be discharged on account of the view taken by the court in this jurisdiction that positive evidence must be presented that they have been seen by some reliable witnesses, who can identify them, outside of the jurisdiction of the

United States. Formerly the officers in charge of this station sent a number of their men over to Ciudad Juarez every day to meet the incoming trains, with particular instructions to take a good look at every Chinaman who arrived, so as to be able to identify them in case they should be caught later on in the United States and particularly within this jurisdiction. This practice had to be abandoned, however, because the authorities at Ciudad Juarez threatened our officers with arrest if they should take pictures or descriptions of any Chinamen arriving there, and, therefore, El Paso is the El Dorado for smuggled Chinamen to come through. In fact, one of the reputed Chinese smugglers told me that they always prefer, if any "doubt" exists about the right of a Chinaman to be in this country, that he should be arrested, because after his discharge, which is sure to follow, the right of that particular Chinaman can not be questioned any more, no matter where in the United States he should be held up again. * * *

I inclose herewith two copies of certain kinds of papers very frequently used by Chinamen who are not in possession of genuine certificates of residence. These are the so-called affidavits for native-born Chinamen and Chinese merchants. The procedure of getting these papers is, according to my best information and belief, the following: Chinese laborers who arrive at the ports of Salina Cruz, Manzanillo, or Mazatlan, Mexico (mostly Salina Cruz), proceed to the City of Mexico; they are there taken in charge by a certain Chinaman, who maintains regular headquarters and a school for their instruction; immediately after their arrival in Mexico City they are * * * photographed. From every negative there are several prints made, and two copies are sent to the particular place in the United States where the individual Chinaman wants to go, and either a native-born or merchant's affidavit is secured, sworn to before a notary, and then sent to El Paso or to Mexico. Armed with this certificate, the Chinaman is smuggled across the border, and the next day presents himself in the office of the inspector in charge, asking his indorsement for the railroad trip to San Francisco, New Bedford, Mass., St. Louis, or whichever place he may want to go, or rather from whichever place the affidavit emanated. As long as these affidavits are accepted by the courts as good evidence of the right of the particular Chinaman to be in this country, the smuggling industry will continue, and the rumor that the smugglers are "in with the Government officials" will not be eradicated.

Another class of smuggled Chinamen are those who do not possess any papers of any kind, who are brought over at some convenient place a few miles away from an immigrant station or a place where an officer is stationed, and put into box cars going toward the destination where these Chinamen want to go, mostly California. * * *

13. Reports of Inspectors in Charge.

Under this subtitle in the report for 1906 (pp. 96–98) the organization of the Chinese branch of the service was explained. Any further remarks on the subject would be mere repetition, and space will not permit of the introduction herein of any detailed comment concerning the interesting reports received by the Bureau from the officers in charge of the various districts throughout the country. These reports are as satisfactory as can be expected under existing conditions, and show that the officers are exerting the best possible efforts to prevent evasions and violations of the Chinese-exclusion laws. Under the first subtitle of this title (pp. 163–167) the Bureau has given expression to views concerning the laws in general, and has shown the unsatisfactory state of their enforcemment due to circumstances entirely beyond its control. Until some steps are taken to effect a change in these circumstances the Bureau can hardly expect that the reports of its field officers will show much progress in the active and affirmative execution of the statutes; but it is satisfied that the employees engaged upon this difficult and embarrassing matter are putting forth their best efforts and are accomplishing all that it is possible to accomplish under present conditions.

14. Financial Statement.

A separate financial statement concerning the expenses of enforcing the Chinese-exclusion laws can not conveniently be given, as the appropriation for the past year stipulated that such expenses should be paid from the immigrant fund. Full particulars are therefore given in the statement constituting subtitle 9 of Title I (p. 161).

III. NATURALIZATION.

This title in the report for 1906 was devoted to a brief reiteration of the views set forth in former reports concerning the subject of naturalization, an expression of gratification at the outcome of the labors of the commission appointed by the President in the summer of 1905, and a confident prophecy as to the future of the new Division of Naturalization to be organized under the provisions of the act of June 29, 1906. That the Bureau was not unduly optimistic it believes is demonstrated by the following report submitted by Richard K. Campbell, chief of the new division:

Department of Commerce and Labor,
Bureau of Immigration and Naturalization,
Washington, July 1, 1907.

Sir: I have the honor to submit herewith a report of the operations of the Division of Naturalization for the fiscal year ended June 30, 1907. To the report are appended certain recommendations accompanied by the reasons in support thereof.

ORGANIZATION OF THE DIVISION.

In accordance with the concluding paragraph of the naturalization act of June 29, 1906, its general provisions did not become operative until the expiration of ninety days after its approval. Sections 1, 2, 28, and 29, however, became effective immediately. The first two of these sections provide for the organization of an administrative office in the Department of Commerce and Labor and an adequate record of all aliens upon their arrival at any port in the United States. Sections 28 and 29, respectively, authorize the Secretary of Commerce and Labor to issue such rules and regulations as would be needful for the effective administration of the law, and provide an appropriation of $100,000 for carrying out the provisions of the act.

Under the authority thus conferred, the Secretary, on July 14, 1906, established this division in the Bureau of Immigration and Naturalization, appointed a chief at $4,000 per annum, and assigned to his office one clerk at $1,600, one at $1,200, and a messenger at $720. No addition was made to this force until the following October, after the entire law had become operative, and then only from time to time as the requirements of the work made such appointments imperative. The present official force of the division is stated further on in this report.

PRELIMINARY WORK.

The preliminary work consisted in part of the publication of the act and such other portions of the statutes as continued vital, to which were appended, after careful preparation, such rules and regulations as were needed to put the laws into effective operation. The care required in the preparation of the rules may be partly conjectured from the fact that there are upward of 3,000 courts clothed with authority to confer citizenship, whose clerks are of all grades of experience and intelligence. Next in importance were the devising and establishment of a filing system that would make it possible, readily and with certainty, to locate any of the many thousand papers that would annually be added to the files. Since the law required duplicates of all naturalization papers to be kept in the Department, and since such papers, apart from the general correspondence, would run up yearly into the hundreds of thousands, their usefulness as well as the prompt dispatch of business would necessarily depend upon the foresight and good judgment shown in the system of filing adopted. The time and thought thus consumed have been well spent, and the division feels that it can court the most critical examination of the system inaugurated.

The next step was the identification, through authoritative reports of the various State law officers, of the State courts having authority under the act to naturalize aliens. This was followed by correspondence with the clerks of such of those courts as desired to avail themselves of the power so conferred, as well as with clerks of the Federal courts, to ascertain from the amount of such business done by them, respectively, during the preceding year or two the probable quantity of declarations of intentions, petitions for naturalization, and certificates of naturalization in separately bound volumes such clerks would require for immediate use. Besides such supplies there were various blank forms for monthly reports of papers filed, for quarterly reports of receipts of money, and for other purposes. Also it was necessary to select and have manufactured under contract the safety paper prescribed by law for the certificates, to prepare a design for engraving the certificates, to have the declarations and petitions printed, and to have them bound in volumes so as to preserve them in permanent form as part of the official records of the various courts. Until the first of October, last, all these details were attended to by the official force of four appointed in July. To have accomplished unaided all that had to be done to put the courts in possession of the papers requisite to administer the law by September 27, 1906, would have been physically impossible. To the intelligence and energy of the Chief of the Division of Printing it is due that many of these details, and a number of others which might be recited, were promptly discharged, and the huge task of shipment of the necessary supplies was made in time to admit of all such courts as established their authority to naturalize aliens entertaining naturalization proceedings under the new law.

The following table shows the total naturalization supplies issued during the nine months of the fiscal year. The declarations of intention were furnished in triplicate and the petitions for naturalization and the certificates of naturalization in duplicate form:

Total number of clerks supplied	1,879
Declarations of intention furnished	138,500
Petitions for naturalization furnished	66,000
Certificates of naturalization furnished (2,941 books)	37,645
All other miscellaneous forms furnished	334,000
Total	576,145
Record books for declarations of intention furnished	2,115
Record books for petitions for naturalization furnished	1,989
Total	4,104

CHARACTER OF WORK SINCE SEPTEMBER 27, 1906.

Since the law became operative the bulk of the work of the division, besides that of receiving and preparing the correspondence, organization of filing and accounting systems, and adjusting the burden with a view to secure the best results with the minimum expenditure of time and labor, has been the examination of the duplicate declarations, petitions, and certificates transmitted to it by clerks of courts. These papers, especially the petitions, are very elaborate in detail and constitute a wide departure from the lax naturalization proceedings in operation heretofore. In the examination a large majority of them was found to be so defective as to require their return to the clerks of courts for correction, accompanied by detailed statements of defects with request for correction, both of the original and the duplicate, as well as the triplicates of declarations, and transmittal of the duplicates so corrected for the division's files. This work shows some diminution as the clerks become familiar with the new law, but as there are frequent changes in the office of clerk of court, by popular election, it must to a considerable extent be a part of the permanent work of the division. Both because of the serious consequences of the loss of a petition or certificate and to insure against depending upon memory as to the transmission of such papers, it is necessary to require that mail packages containing them shall be registered.

On April 1, a record of the correspondence was established and the accompanying table will show the work of the division for three months of the fiscal year. No record was previously kept because of the insufficiency of clerical help before that date.

Month.	Incoming mail.			Outgoing mail.		
	Registered.	Unregistered.	Total.	Letters.	Documents.	Total.
April	1,014	3,338	4,352	5,879	295	6,174
May	925	2,859	3,784	5,207	278	5,485
June	850	3,073	3,923	4,351	348	4,699
Total	2,789	9,270	12,059	15,437	921	16,358
Average per working day	36+	120+	157−	200+	12−	212−

The foregoing correspondence consists of notices to United States attorneys of dates set for hearings of petitions, letters to verify the publication by the clerks of courts of such hearings as required by law, letters construing the provisions of the law for general correspondents, clerks of courts, United States attorneys, and judicial officers. It is impossible to give within the brief compass of this report anything more than a mere outline of the wide range of inquiries addressed to the division in reference to public lands claims, to derivative citizenship, to the naturalization of the widows and minor children of deceased declarants, to naturalization by marriage, to the right of protection abroad, to the cases of seamen, soldiers, or marines, and the countless questions arising out of all of them, according to the variety of their attendant circumstances. There is no reason to suppose that this character of the work devolving upon the division will grow less in amount, and as the individual rights to be ascertained are extensive in character and importance it is believed that all such inquiries are entitled to well-considered and immediate replies.

OFFICIAL FORCE OF THE DIVISION.

Since October, 1906, the pressure of increased work has from time to time necessitated various additions to the official force of the division, which were essential to dispose promptly of the ever-increasing volume of business. It is believed that with the clerical force, as now organized, and such additions as will be recommended in the estimates for the ensuing year, the work so far undertaken can be disposed of promptly. There should, however, be assigned one or more clerks, as may be required, to compile tables showing the nationalities of the various aliens who are granted the rights of American citizenship, in addition to the data regarding naturalizations shown in the tabulated statement under the heading "Work of courts." Such information can not fail to be of practical value for comparison with the tables of nationalities of aliens emigrating to this country reported annually by the Bureau.

On the 30th of June, 1907, following was the classification of the personnel of the division: Chief of division, assistant chief of division, 2 clerks of class 4; 2 clerks of class 3; 4 clerks of class 2; 6 clerks of class 1; 4 clerks, at $1,000 each; 1 copyist, at $900; 1 messenger; 1 assistant messenger. These clerks have been carefully selected from other branches of the public service, strictly and exclusively in accordance with the merit system, as shown by their capabilities in the performance of the duties assigned to them in the branches in which they have been employed. Increases in compensation have been granted only after demonstration of their success in the work of the division. The result of this policy has been alike gratifying to the division and creditable to the appointees.

WORK OF COURTS.

Herewith is presented in tabulated form a report of the work of the courts during the nine months of the fiscal year, since the new law became effective:

Declarations of Intention and Petitions for Naturalization Filed, and Certificates of Naturalization Issued and Denied, Nine Months ended June 30, 1907, by States.

DECLARATIONS OF INTENTION FILED.

State or Territory.	Number of courts.			Second quarter.			Third quarter.			Fourth quarter.			Total.		
	Federal.	State.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.
Alabama	2	15	17	10	22	32	35	122	157	40	25	65	85	169	254
Alaska	5	.....	5	17	.....	17	20	.....	20	50	.....	50	87	.....	87
Arizona	3	9	12	16	35	51	19	25	44	5	25	30	40	85	125
Arkansas	7	27	34	1	3	4	18	6	24	8	6	14	27	15	42
California	4	55	59	135	1,360	1,495	68	1,841	1,909	60	1,863	1,923	263	5,064	5,327
Colorado	2	52	54	33	82	115	19	310	329	40	280	320	92	672	764
Connecticut	2	9	11	53	279	332	31	224	255	39	295	334	123	798	921
Delaware	1	3	4	30	8	38	39	1	40	39	7	46	108	16	124
District of Columbia	1	.....	1	44	.....	44	65	.....	65	96	.....	96	205	.....	205
Florida	4	17	21	22	16	38	47	16	63	53	17	70	122	49	171
Georgia	6	7	13	7	3	10	9	6	15	11	18	29	27	27	54
Hawaii	1	6	7	13	2	15	7	4	11	25	10	35	45	16	61
Idaho	3	23	26	4	146	150	3	243	246	2	314	316	9	703	712
Illinois	4	90	94	50	1,107	1,157	116	1,742	1,858	98	2,153	2,251	264	5,002	5,266
Indiana	4	62	66	55	972	1,027	4	59	63	51	54	105	110	1,085	1,195
Indian Territory	28	.....	28	18	.....	18	19	.....	19	27	.....	27	64	.....	64
Iowa	.....	99	99	.....	357	357	.....	447	447	.....	271	271	.....	1,075	1,075
Kansas	.....	95	95	.....	211	211	.....	165	165	.....	169	169	.....	545	545
Kentucky	2	32	34	7	8	15	8	11	19	12	11	23	27	30	57
Louisiana	4	12	16	34	8	42	66	8	74	86	4	90	186	20	206
Maine	1	15	16	31	23	54	38	42	80	52	44	96	121	109	230
Maryland	1	18	19	66	225	291	45	138	183	83	169	252	194	532	726
Massachusetts	2	14	16	1,054	323	1,377	1,113	362	1,475	1,285	704	1,989	3,452	1,389	4,841
Michigan	3	84	87	.....	542	542	5	608	613	2	535	537	7	1,685	1,692
Minnesota	12	82	94	152	725	877	138	749	887	149	949	1,098	439	2,423	2,862
Mississippi	4	19	23	5	2	7	8	12	20	10	9	19	23	23	46
Missouri	6	67	73	150	39	189	287	59	346	512	79	591	949	177	1,126
Montana	2	27	29	.....	282	282	2	189	191	1	317	318	3	788	791
Nebraska	2	75	77	2	230	232	1	282	283	1	229	230	4	741	745
Nevada	1	10	11	3	27	30	1	86	87	6	130	136	10	243	253
New Hampshire	1	10	11	2	51	53	.....	41	41	.....	58	58	2	150	151
New Jersey	1	21	22	8	708	716	3	847	850	4	1,006	1,010	15	2,561	2,579
New Mexico	3	a 5	8	16	a 14	30	20	a 17	37	15	a 9	24	51	a 40	92
New York	5	60	65	4,356	1,193	5,549	3,877	2,024	5,901	4,009	3,433	7,442	12,242	6,650	18,892
North Carolina	1	8	9	1	7	8	1	6	7	5	5	10	7	18	25
North Dakota	3	40	43	49	874	923	93	513	606	172	1,001	1,173	314	2,388	2,702
Ohio	2	71	73	111	468	579	70	383	453	132	597	729	313	1,448	1,761
Oklahoma	22	.....	22	49	.....	49	55	.....	55	30	.....	30	134	.....	134

Oregon	2	32	34	3	244	247	6	296	302	5	358	363	14	898	912
Pennsylvania	5	57	62	1,801	582	2,383	1,932	516	2,448	2,137	603	2,740	5,870	1,701	7,571
Rhode Island	1	.....	1	141	.....	141	189	.....	189	265	.....	265	595	.....	595
South Carolina	2	4	6	3	.....	3	14	.....	14	15	.....	15	32	.....	32
South Dakota	1	50	51	5	252	257	3	330	333	2	388	390	10	970	980
Tennessee	4	8	12	.....	2	2	15	.....	15	20	.....	20	35	2	37
Texas	15	91	106	30	160	190	64	163	227	49	156	205	143	479	622
Utah	1	26	27	1	29	30	.....	114	114	6	131	137	7	274	281
Vermont	.....	10	10	.....	6	6	.....	20	20	.....	22	22	.....	48	48
Virginia	4	22	26	43	15	58	69	29	98	34	21	55	146	65	211
Washington	5	37	42	60	769	829	47	799	846	134	716	850	241	2,284	2,525
West Virginia	4	19	23	4	21	25	5	25	30	10	38	48	19	84	103
Wisconsin	1	70	71	43	424	467	53	584	637	78	527	605	174	1,535	1,709
Wyoming	1	13	14	.....	33	33	11	38	49	5	71	76	16	142	158

PETITIONS FOR NATURALIZATION FILED.

Alabama	2	15	17	2	11	13	6	17	23	4	8	12	12	36	48
Alaska	5	.....	5	6	.....	6	4	.....	4	9	.....	9	19	.....	19
Arizona	3	9	12	8	9	17	1	9	10	4	14	18	13	32	45
Arkansas	7	27	34	3	1	4	9	1	10	5	8	13	17	10	27
California	4	55	59	15	124	139	6	266	272	12	357	369	33	747	780
Colorado	2	52	54	4	68	72	2	112	114	3	105	108	9	285	294
Connecticut	2	9	11	24	93	117	3	53	56	5	59	64	32	205	237
Delaware	1	3	4	17	9	26	3	.....	3	8	1	9	28	10	38
District of Columbia	1	.....	1	15	.....	15	23	.....	23	27	.....	27	65	.....	65
Florida	4	17	21	8	2	10	12	2	14	10	7	17	30	11	41
Georgia	6	7	13	5	.....	5	5	1	6	2	6	8	12	7	19
Hawaii	1	6	7	.....	.....	.....	5	1	6	2	2	4	7	3	10
Idaho	3	23	26	.....	67	67	.....	49	49	2	67	69	2	183	185
Illinois	4	90	94	20	215	235	23	479	502	17	423	440	60	1,117	1,177
Indiana	4	62	66	.....	40	40	.....	34	34	.....	31	31	.....	105	105
Indian Territory	28	.....	28	16	.....	16	17	.....	17	13	.....	13	46	.....	46
Iowa	.....	99	99	.....	121	121	.....	143	143	.....	111	111	.....	375	375
Kansas	.....	95	95	.....	197	197	.....	121	121	.....	97	97	.....	415	415
Kentucky	2	32	34	3	.....	3	1	3	4	1	4	5	5	7	12
Louisiana	4	12	16	13	.....	13	11	4	15	12	2	14	36	6	42
Maine	1	15	16	7	27	34	9	12	21	7	37	44	23	76	99
Maryland	1	18	19	33	49	82	18	38	56	23	40	63	74	127	201
Massachusetts	2	14	16	206	72	278	209	105	314	228	198	426	643	375	1,018
Michigan	3	84	87	.....	277	277	1	309	310	2	324	326	3	910	913
Minnesota	12	82	94	21	207	228	38	336	374	44	349	393	103	892	995
Mississippi	4	19	23	.....	.....	.....	.....	5	5	.....	2	2	.....	7	7
Missouri	6	67	73	9	17	26	46	11	57	52	14	66	107	42	149
Montana	2	27	29	.....	106	106	2	81	83	.....	123	123	2	310	312
Nebraska	2	75	77	1	289	290	.....	161	161	.....	179	179	1	629	630
Nevada	1	10	11	.....	1	1	.....	6	6	.....	11	11	.....	18	18
New Hampshire	1	10	11	.....	14	14	.....	20	20	.....	30	30	.....	64	64

a Territorial.

DECLARATIONS OF INTENTION AND PETITIONS FOR NATURALIZATION FILED, AND CERTIFICATES OF NATURALIZATION ISSUED AND DENIED NINE MONTHS ENDED JUNE 30, 1907, BY STATES—Continued.

PETITIONS FOR NATURALIZATION FILED—Continued.

State or Territory.	Number of courts.			Second quarter.			Third quarter.			Fourth quarter.			Total.		
	Federal.	State.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.	In Federal courts.	In State courts.	Total.
New Jersey	1	21	22	.....	192	192	2	260	262	.....	342	342	2	794	796
New Mexico	3	[a] 5	8	.....	[a] 6	6	6	[a] 1	7	6	[a] 9	15	12	[a] 16	28
New York	5	60	65	559	299	858	723	741	1,464	956	1,194	2,150	2,238	2,234	4,472
North Carolina	1	8	9	.....	1	1	.....	2	2	2	.....	2	2	3	5
North Dakota	3	40	43	4	319	323	1	435	436	.....	486	486	5	1,240	1,245
Ohio	2	71	73	10	74	84	10	96	106	25	212	237	45	382	427
Oklahoma	22	.....	22	93	.....	93	87	.....	87	80	.....	80	260	.....	260
Oregon	2	32	34	5	84	89	10	79	89	16	87	103	31	250	281
Pennsylvania	5	57	62	749	137	886	451	246	697	523	162	685	1,723	545	2,268
Rhode Island	1	.....	1	44	.....	44	69	.....	69	145	.....	145	258	.....	258
South Carolina	2	4	6	2	.....	2	1	.....	1	3	.....	3	6	.....	6
South Dakota	1	50	51	3	103	106	4	178	182	.....	111	111	7	392	399
Tennessee	4	8	12	.....	.....	.....	.....	1	1	6	1	7	6	2	8
Texas	15	91	106	8	97	105	5	84	89	22	59	81	35	240	275
Utah	1	26	27	.....	5	5	.....	21	21	1	30	31	1	56	57
Vermont	.....	10	10	.....	.....	.....	.....	10	10	.....	14	14	.....	24	24
Virginia	4	22	26	7	4	11	9	5	14	13	3	16	29	12	41
Washington	5	37	42	27	262	289	26	242	268	44	204	248	97	708	805
West Virginia	4	19	23	.....	2	2	.....	11	11	.....	9	9	.....	22	22
Wisconsin	1	70	71	5	150	155	12	193	205	49	246	295	66	589	655
Wyoming	1	13	14	.....	16	16	2	28	30	1	37	38	3	81	84

[a] Territorial.

CERTIFICATES OF NATURALIZATION ISSUED AND DENIED.

State or Territory.	Number of courts.			Certificates issued.									Certificates denied.		
				Third quarter.			Fourth quarter.			Total.					
	Federal.	State.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.
Alabama	2	15	17		8	8	4	5	9	4	13	17			
Alaska	5		5	3		3	5		5	8		8			
Arizona	3	9	12	3	1	4	2	3	5	5	4	9		3	3
Arkansas	7	27	34	3		3	4		4	7		7			
California	4	55	59	7	33	40	7	125	132	14	158	172	4	29	33
Colorado	2	52	54	3	33	36	2	62	64	5	95	100		6	6
Connecticut	2	9	11	18	56	74	5	34	39	23	90	113	1	6	7
Delaware	1	3	4	15		15	1	7	8	16	7	23			
District of Columbia	1		1	7		7	14		14	21		21	4		4
Florida	4	17	21	5		5	9		9	14		14			
Georgia	6	7	13	1		1	2	1	3	3	1	4			
Hawaii	1	6	7		2	2	3		3	3	2	5			
Idaho	3	23	26		10	10		63	63		73	73		3	3
Illinois	4	90	94	9	95	104	10	316	326	19	411	430		9	9
Indiana	4	62	66		20	20		32	32		52	52		1	1
Indian Territory	28		28	13		13	12		12	25		25	1		1
Iowa		99	99		66	66		49	49		115	115		8	8
Kansas		95	95		106	106		100	100		206	206		5	5
Kentucky	2	32	34	2		2				2		2	1	1	2
Louisiana	4	12	16	10		10	7		7	17		17			
Maine	1	15	16	2	11	13	5	3	8	7	14	21			
Maryland	1	18	19	15	28	43	27	28	55	42	56	98		6	6
Massachusetts	2	14	16	130	23	153	180	50	230	310	73	383	9	3	12
Michigan	3	84	87		124	124		175	175		299	299		5	5
Minnesota	12	82	94	15	70	85	29	216	245	44	286	330		11	11
Mississippi	4	19	23		2	2		1	1		3	3			
Missouri	6	67	73	5	6	11	45	15	60	50	21	71			
Montana	2	27	29		45	45	1	61	62	1	106	107		6	6
Nebraska	2	75	77		179	179		141	141		320	320		3	3
Nevada	1	10	11					3	3		3	3			
New Hampshire	1	10	11		7	7		13	13		20	20			
New Jersey	1	21	22		44	44		191	191		235	235		2	2
New Mexico	3	a 5	8		a 3	3	2	a 1	3	2	a 4	6			
New York	5	60	65	231	314	545	411	614	1,025	642	928	1,570	14	34	48
North Carolina	1	8	9					2	2		2	2			
North Dakota	3	40	43	1	134	135	1	349	350	2	483	485		2	2
Ohio	2	71	73	8	20	28	7	72	79	15	92	107		5	5
Oklahoma	22		22	10		10	89		89	99		99	5		5
Oregon	2	32	34	1	32	33	12	81	93	13	113	126		3	3
Pennsylvania	5	57	62	556	49	605	338	83	421	894	132	1,026	17	3	20

a Territorial.

Declarations of Intention and Petitions for Naturalization Filed, and Certificates of Naturalization Issued and Denied Nine Months ended June 30, 1907, by States—Continued.

CERTIFICATES OF NATURALIZATION ISSUED AND DENIED—Continued.

State or Territory.	Number of courts.			Certificates issued.									Certificates denied.		
				Third quarter.			Fourth quarter.			Total.					
	Federal.	State.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.	By Federal courts.	By State courts.	Total.
Rhode Island	1	.....	1	32	.....	32	49	.....	49	81	.....	81	.....	.....	.....
South Dakota	1	50	51	1	57	58	3	125	128	4	182	186	.....	5	5
Texas	15	91	106	.....	29	29	11	79	90	11	108	119	.....	3	3
Utah	1	26	27	.....	1	1	.....	11	11	.....	12	12	.....	3	3
Vermont	.....	10	10	.....	.....	.....	.....	6	6	.....	6	6	.....	.....	.....
Virginia	4	22	26	5	1	6	3	5	8	8	6	14	.....	.....	.....
Washington	5	37	42	7	138	145	19	183	202	26	321	347	1	20	21
West Virginia	4	19	23	.....	.....	.....	2	3	5	2	3	5	.....	.....	.....
Wisconsin	1	70	71	3	60	63	4	165	169	7	225	232	.....	7	7
Wyoming	1	13	14	.....	3	3	.....	6	6	.....	9	9	.....	1	1

RECAPITULATION.

	Second quarter.	Third quarter.	Fourth quarter.	Total.
Declarations of intention filed	21,627	23,260	27,797	72,684
Petitions for naturalization filed	5,719	6,884	8,199	20,802
Certificates of naturalization issued	.....	2,931	4,804	7,735
Certificates of naturalization denied	.....	.....	.....	250
Number of courts exercising jurisdiction:				
Federal	.....	.....	.....	201
State	.....	.....	.....	1,678
Total	.....	.....	.....	1,879

The data in the above table will repay careful study. They should, perhaps, but for the necessity of economizing space, have been presented in the form of several tables, so that certain important features could be presented separately.

The total number of courts which have issued naturalization papers is 1,879, of which 201 are Federal and 1,678 State or Territorial courts. In the States of Iowa, Kansas, and Vermont the Federal courts have transacted no naturalization business. In Rhode Island and South Carolina, on the other hand, there have been no transactions in the State courts.

In most of the States, especially in the West, the bulk of the business of naturalization has been confined to the State courts, as in Ohio, Michigan, Minnesota, Wisconsin, Montana, Nebraska, North and South Dakota, Oregon, Texas, Utah, Washington, California, Idaho, Indiana, Iowa, and Kansas: This is also true of a few of the Eastern States, as Connecticut, Maryland, New Hampshire, and New Jersey. In those States, however, in which the great bulk of the naturalizations is conferred (New York, Pennsylvania, and Massachusetts) the Federal courts are chiefly resorted to.

In New York, Pennsylvania, and Massachusetts the distribution between these courts for the States named was as shown in the subjoined statement:

	Declarations filed.		Petitions filed.		Certificates issued.	
	Federal courts.	State courts.	Federal courts.	State courts.	Federal courts.	State courts.
New York	12,242	6,650	2,238	2,234	642	928
Pennsylvania	5,870	1,701	1,723	545	894	132
Massachusetts	3,452	1,389	643	375	310	73

How far these variations in the custom of residents of different States in resorting to State or Federal tribunals are attributable to varying laxity or strictness of the courts in conforming to the requirements of the law, and how far to convenience of access to the courts, can only be determined by a study of local conditions. There can be no question, however, that in some, if not most, of the States the meagerness of the fees allowed to the clerks has deterred many State courts from assuming to naturalize aliens, who are thus constrained to resort to the United States courts, upon which the duty is obligatory. Some few of the State courts have, indeed, after being supplied with the official blank forms and copies of the law at their request, refused to entertain applications and returned the forms, in view of the inadequacy of the compensation, after learning the extent of the duties and the penalties for neglect imposed upon them. Others have never applied for the blanks, referring applicants for citizenship to the Federal courts. To the complaints that have been made against the law as a whole upon this ground it is a sufficient reply to suggest that the fees be enlarged so as to be more nearly compensatory for the amount and character of the work imposed upon clerks of courts and the risks incurred by them.

This situation has been further accentuated by the opinions of the legal authorities of some of the States which provide a fixed annual salary for the clerks of their courts, that the naturalization fees can not be retained by such clerks as compensation for the additional work required by the naturalization act, but must be accounted for to the State. In the State of Washington, where the State courts have been the chief resort of applicants for naturalization, a general fee bill became effective June 13, 1907, providing larger fees for naturalizing aliens than permitted by the Federal act and penalizing the collection of different fees. As the attorney-general of that State has advised the clerks of the State courts that the State law is the supreme authority for them, it is easy to see that they will soon cease to entertain applications for naturalization, leaving the burden of this work exclusively to the United States courts sitting in that State. Both for the public convenience of access to the means of securing citizenship and to relieve the Federal courts of the excessive burden which would interfere seriously with the prompt disposal of general litigation, it seems important to raise the scale of fees and to declare by legislation, as is a fact, that State courts and their clerks are, when engaged in administering the naturalization law, agencies exclusively of the Federal Government and as such amenable only to the laws of the United States. It may be conceded that the General Government has no power to impose with authority any duties upon tribunals which are the exclusive creations of the States. On the other hand, if such tribunals, with the tacit or expressed consent of the sovereignties to which they owe their existence, assume a permissive jurisdiction granted by the General Government, their exercise of it is bound strictly by the terms of the authority, equally with Federal courts.

For the first time in the annals of this country it is possible to state definitely the number of aliens who, in a given space of time, have been clothed with the privileges

and responsibilities of American citizenship—a singular fact, and one which by itself vindicates the wisdom of the last Congress in passing the act of June 29, 1906. While it has been impossible heretofore to determine definitely the number annually added to the body politic by naturalization, many estimates have been made by persons who gave time and study to the subject, and the most reliable estimates indicate that about 100,000 per annum have been naturalized during the past few years. These figures seem rather conservative in view of the heavy immigration of aliens, the practical inducements to seek citizenship, such as the rights conferred under our public land laws, employment in State and Federal civil service, the activity of local political workers, and the extreme laxity, especially of minor courts.

Two results immediately ensued from the passage of the law. The first of these was an unprecedented activity in naturalizing aliens just before the new law became effective, and the second was a corresponding diminution in the flow of the tide toward the naturalization courts immediately thereafter.

During the nine months past but 7,735 aliens have been naturalized. That some care has been exercised by the courts appears from the fact that 250 petitions were denied. The total number of petitions filed during the same time was 20,802, leaving something less than two-thirds of the applications to be passed upon in the coming fiscal year. Of the total number of petitions for naturalization filed during the fiscal year ended June 30, 1907, 67 were filed under the provisions of section 2166, Revised Statutes, and 11 under the act of July 26, 1894, chapter 165. Of declarations of intention, popularly known as "first papers," there were filed 72,864. A comparison of the figures for each of the quarters will show that the business, checked by the requirements of the new law, has grown steadily as the courts and the public became familiar with those requirements, and leads to the conclusion that the normal conditions will be resumed, as to the number of petitioners, within a year or two at most.

In the figures reported from Indiana a logical result is shown of the effect of the law in those States which permit aliens to vote who have merely taken out first papers, or declarations of intention. In the quarter ended December 31, 1906, a total of 1,027 aliens filed declarations in that State, while the next two quarters showed, respectively, but 63 and 105 declarants. Plainly the purpose of the provision of the new law which forbids the issuance of a certificate of naturalization within thirty days prior to the holding of a general election in any State or Territory is defeated in the State of Indiana, as it likewise is in the eight other States which confer the privilege of suffrage upon aliens. That corresponding figures as to the number of declarants are not reported from the other States does not imply that the same practice will not, when occasion seems to require it, prevail there. In at least one of such States it was announced by its attorney-general that the new act deprived the declarants of the right to vote.

CANCELLATION OF CERTIFICATES.

Section 15 of the new act imposes upon the United States attorneys the duty of entering a motion for the cancellation of a certificate of naturalization on sworn evidence of illegality or irregularity in its issuance. In many instances notification reaches the United States attorneys from other sources than the Division of Naturalization. Of these there is no record until the report is received from the clerk of the court, in accordance with the provisions of the act. Cases have been instituted at the request of the division, based chiefly upon the reports by the Bureau of Citizenship of the Department of State.

The subjoined table shows, by States, the number of cases instituted under section 15 of the act of June 29, 1906, for cancellation of certificates of naturalization, the number of certificates canceled, and the number pending before the courts during the first nine months of the operation of the law, as shown by the records of this division:

State.	Cases.	Certificates canceled.	Cases pending.	State.	Cases.	Certificates canceled.	Cases pending.
Alabama	1		1	Minnesota	1	1	
California	2	1	1	Missouri	1		1
Colorado	2	2		Montana	2	1	1
Connecticut	5	2	3	Nebraska	1	1	
Georgia	1		1	New Jersey	1	1	
Illinois	26	13	13	New York	60	48	12
Indiana	1		1	Ohio	7	2	5
Iowa	1	1		Pennsylvania	20	10	10
Kentucky	1		1	Texas	1		1
Louisiana	1		1	Virginia	2	1	1
Massachusetts	3	2	1				
Michigan	3		3	Total	143	86	57

FIELD SERVICE.

The experience of the division for the past nine months has shown conclusively, both as a measure of economy and of efficiency, that there should be appointed for service throughout the United States outside of Washington a corps of examiners. Even if it were in agreement with the practice in the Department of Justice to engage in the work, through the various United States attorneys and their assistants, of collecting evidence in behalf of the Government for use in cases in which the latter is a party, which it is not, such a plan is both cumbrous and expensive. The duties of the United States attorneys are already largely increased by the court work imposed upon them by the new act, not alone in appearing in naturalization proceedings to cross-examine petitioners and their witnesses, but also in the preparation and conduct of proceedings to cancel certificates under the provisions of section 15. They can not, in justice to other duties required of them, undertake themselves to make such an investigation of each case as would supply a basis for successful cross-examination. To employ assistant attorneys for this purpose would be to incur the expense of professional agents to accomplish what can be equally well done by nonprofessional, and therefore less highly salaried, examiners.

It might seem that the cross-examination provided for by the act would be sufficient protection to the Government against fraud and misrepresentation, but, waiving the ineffectiveness of such a means of detecting falsehood in the absence of a prior investigation, the consumption of the time of the court and the consequent delay in other pending litigation by prolix cross-examination to discover thereby some theretofore unknown or unsuspected defect in a petition complete upon its face, should be sufficient to condemn an exclusive reliance upon cross-examination. Though the employment of examiners is held to be objectionable on the score of expense, it must be conceded that it is much less so than the delay of the business of the courts. Doubtless a great majority of the cases would be shown to be unobjectionable, if given prior investigation, and petitioners in such cases could be promptly admitted and the time of the United States attorneys and the courts could be concentrated on the relatively small number of defective petitions, with the further advantage that the defects in these could be immediately developed without consuming time and labor upon other points of the petitions. It is not extravagant to say that unless a prior examination is made the new law will soon become not merely ineffective, but as well a nuisance both to the courts and to the public, and that, in the judgment of the division, the success of this reform in our naturalization laws turns upon the effective use by examiners of the ninety days' interval between the filing and the hearing of the petitions.

If the employment of examiners is opposed on the score of cost, it is replied that a similar objection lies against any undertaking. Each one of more than a million alien immigrants, and many witnesses who appear for them, are examined, simply to determine their provisional right to land on our soil. Is it not at least equally the part of prudence to examine the one-tenth of that number applying for naturalization before admitting them to the high and unconditional status of citizens? There is furthermore the need of such examiners to investigate alleged fraudulently obtained certificates, not only to establish the existence of fraud or irregularity but also to protect those who have complied with the law in good faith and honesty from the expense and mortification of defending their rights from unfounded or malicious assaults.

In this connection it is suggested that the increase of the fees sufficiently to furnish clerks of courts a fair compensation for their labor and responsibility, as already advised, would also furnish means to pay the salaries and expenses of examiners, thus making the entire service self-supporting. It now costs $5 for any alien to land in this country. Is it unreasonable to require of him $10 payable in installments extending from two to seven years for the privilege of becoming an American citizen, considering the cost of the administrative and court proceedings to protect the United States from fraud and himself from the effects of his ignorance or the fraud of others? This was the sum recommended two years since by the President's commission, carefully estimated to make the service self-supporting and relieve the American people of the burden of such costs.

RECOMMENDATIONS.

Although the better plan is to await the benefit of continued experience of the operation of a law, and not hastily to amend it, yet there are some features of the act of June 29, 1906, that from present experience too obviously require amendatory legislation to justify further delay.

Far the most important requirement is legislation giving specifically a right of appeal or recourse by writ of error from the decisions in naturalization cases by courts of origi-

nal jurisdiction. Such a provision was recommended by the President's commission in 1905, but was omitted from the act, possibly as an indication that in the judgment of Congress such a right already existed under the general statutory provisions regarding appeals and writs of error. Whatever may have been the reason, the necessity for an opportunity to review and harmonize authoritatively the conflicting views of the various courts of first instance is too important and too obvious to justify the continuance of any doubt or uncertainty on the point. Instances have not been wanting of direct conflict between these courts on various questions of law. Some courts in direct violation of the express terms of the law have entertained the petitions of aliens and granted certificates within a few days after the petitions were filed. Some have apparently construed section 2169 of the Revised Statutes to mean that only Chinese, or "Mongolians," are excluded from naturalization, and that all other races are eligible. Some have leaned far in the opposite direction. This results in an uncertainty as to the law that is embarassing, both to the administrative officers and the courts themselves. It is to be remembered, too, that for many years the naturalization of aliens has been accomplished without any of the accompaniments of dignity which naturally befit the act of bestowing such important rights, and that many of the courts have from long-continued practice come to regard the function lightly and to bestow citizenship with less regard to the evidence of fitness and the requirements of the law than they would bestow upon litigation involving the most trivial property or personal right. The sole consideration has been, in many courts, to dispose of such petitions in the easiest and most expeditious way. Even now some of the judges have intimated that they do not propose to have the time of the courts consumed by too free an exercise by the Government of its right of cross-examination, the implication of the triviality of naturalization as compared with other business before these tribunals being too plain to necessitate explicit statement that the court so thinks. The obvious and only means of putting an end to such views and practices is to provide for a review of the cases by a court of final resort. The fact that the Government has such a right will to a large extent obviate the occasion to use it, except upon constructions of the law.

An alien is now apparently permitted to file his declaration of intention if he has reached his eighteenth year, and two years thereafter, if then a resident of the United States for the preceding five years, to become a citizen by naturalization. He has therefore the advantage over honorably discharged sailors of the Navy, marines, and soldiers, in whose behalf special exceptions are made, for these must have attained the age of 21 before naturalization.

In view of the general terms of the recent act, sections 2166 and 2174 of the Revised Statutes, and the legislation in regard to seamen in the Navy and marines, these should be amended so as to show definitely how much of such requirements shall be waived, especially in regard to residence within the United States and within the State where the petition is to be filed, so as to allow beneficiaries of such special enactments to become citizens on such terms as it is intended to offer them, as well as to remove the doubts which now embarrass the clerks of courts and administrative officers.

Another defect inthe law has been developed in the construction by the Comptroller of the Treasury of the following words from the last paragraph of section 13:

"In case the clerk of any court collects fees in excess of the sum of six thousand dollars in any one year, the Secretary of Commerce and Labor may allow to such clerk from the money which the United States shall receive additional compensation for the employment of additional clerical assistance, but for no other purpose, if in the opinion of the said Secretary the business of such clerk warrants such allowance."

In response to queries, the Comptroller holds that no allowance may be made, under the foregoing terms, in anticipation of needed additional clerical assistance, and that, in consequence of the terms of prohibition in the act of July 1, 1902 (32 Stat., 560), no allowance may be made to reimburse clerks for payment for such additional clerical assistance already employed, since all collections must be turned into the Treasury, whence it can be drawn only in consequence of an express appropriation act. This view annuls the provisions quoted and tends to place clerks of courts still more in an attitude of resistance to the performance of duties imposed by the naturalization law, and demonstrates the importance of appropriate amendatory legislation. It will not occasion surprise, in view of what has already been said in discussing the subject of fees, that complaints have been received from applicants that they are turned away, even from Federal courts, day after day. As the opinion of the Comptroller becomes known, more will be refused the chance to file their papers, since it is hardly reasonable to assume that the clerks will employ, at their own cost and without chance of reimbursement, the additional clerical help to prepare cases filed after the collections have aggregated $6,000 in any year, or to expedite the current business at any time so that the clerks will reach the maximum collections before the year is out,

and thereafter be put to the alternative of refusing to file naturalization papers or of paying for the clerical work required.

There are other amendments that might be suggested, but it is deemed best not to urge them, as the ones above urged are so indispensable and just that their enactment should not be hazarded by coupling with them others as to the merits of which there might be ground for reasonable doubt.

FINANCIAL

Attached hereto is a statement showing the total amount of disbursements from the appropriation of $100,000 for the enforcement of the law during the initial year and the principal items of expenditure. While there may be some few outstanding accounts to settle, they will not materially alter the sum total as given.

Salaries of employees	$18,039.12	Advertising	$99.60
Expenses investigations, traveling, and per diem	357.38	Telegraph service	40.91
Office rent	2,333.31	Telephone service	1.69
Material, blanks, etc	4,780.12	Total	29,243.18
Office furniture and supplies	3,591.05		

Deducting this amount from the $100,000 appropriation, there is left unexpended, and thus restored to the Treasury, a balance of $70,756.82. That the balance is so large is due not alone to economical methods of administration, but also to the fact that, as soon as it became apparent that the last Congress would decline to make any appropriation under the control of this Department for service in the field, outside of Washington, for the ensuing fiscal year, the design of appointing examiners to prepare cases before the hearing of petitioners in open court and thus save the time of the courts and protect the Government from imposition was abandoned. As to the importance of such a service, the views of the division have already been expressed in this report. Had that purpose been put into effect, it is safe to say that the unexpended balance, after payment of salaries and expenses, would have been very small, if the entire appropriation had not been consumed.

As indicative of the self-sustaining possibilities of the service, even at the present low rate of fees and with the very small amount of business transacted by the courts, it is interesting to compare the outlay of $29,243.18 during the past nine months with the collections for the corresponding period, $65,129. The actual result is thus that the Government has operated the new law at a profit of $35,885.82. In other words, the income has been more than double the expense incurred—as a result of omitting the investigation of petitions prior to hearings in court.

CONCLUSION.

It would be premature, even if such a course were in good taste, to indulge in self-congratulation at the results thus far attained in reducing the notorious and long-continued abuses in conferring citizenship by naturalization. That something has been accomplished in that direction is palpable from at least two circumstances—first, the greatly reduced number of naturalizations, and, second, the high grade of the petitioners, as stated by the United States attorneys, and partly shown by the small proportion of denials. The number of cancellations, secured or pending, of certificates improperly issued is another evidence of the practical value of the new law as a reform measure.

It may be anticipated, however, that when the shock of the novelty and the supposed difficulties of the present system of naturalization have, by familiarity with its provisions, ceased to loom so large in the public mind the tide of petitions will flow again in larger volume and efforts successful heretofore will again be resorted to as a means for securing the material advantages of appointments in the civil service, title to public lands, protection in foreign countries, the considerations that induce a thriftily cast ballot, and others. The law gives the opportunity to detect and defeat the designs of those who are unworthy or legally incapable of becoming naturalized citizens in the interval of ninety days which must elapse after the filing of a petition before it can be heard. Doubtless Congress will make suitable and adequate provision to enable the Government to avail itself of this opportunity, so that it may be able not only to remedy the faults of the old system but prevent their repetition in the future.

Respectfully,

RICHD. K. CAMPBELL,
Chief, Division of Naturalization.

Hon. F. P. SARGENT,
Commissioner-General of Immigration.

IV. THE BUREAU AT WASHINGTON.

As in its former reports the Bureau had not undertaken to describe with any particularity or detail the functions performed by its official force located in the Department at Washington, but had practically restricted itself to a description of the results attained by the service in general, it was thought expedient to furnish in the report for the fiscal year 1906 full information with regard to its origin and duties, the work performed during the preceding year, the methods pursued, and the personnel of the force employed at the headquarters of the service. To repeat all, or even a considerable part, of what was then said would be both tiresome and useless. For so much thereof as was descriptive in character reference can readily be had to the said report. With the object, however, of showing the growth in its duties during the past year, the following figures, covering items similar to those mentioned in subtitle 2 of this title in the report for 1906 (pp. 101–105), are given, a comparative arrangement being adopted for convenience. It should be borne in mind that these figures are exclusive of the operations of the Division of Naturalization, for data concerning which reference should be had to the preceding title hereof:

	1906	1907		1906	1907
Immigration appeals of aliens	3,886	2,637	Miscellaneous vouchers, pay rolls, head tax, and other accounts	15,000	17,872
Chinese appeals	221	163	Leaves of absence	3,000	3,200
Aliens arrested and deported	615	1,270	Requests for documents, etc	4,000	5,000
Authorizations hospital treatment	732	662	Chinese certificates of residence compared	1,120	1,158
Authorizations, expenditures, etc.	1,525	3,500	Outgoing communications	28,000	33,400
Contracts	500	450			

In addition to the above, under the provisions of Rule 42 of the Chinese Regulations, applications for certificates of residence have been considered and disposed of during the fiscal year ended June 30, 1907, in the manner indicated by the following table:

Cases pending	33	
Cases reopened	5	
Applications	176	
Total		214
Duplicate certificates of residence issued	139	
Applications denied	15	
Original certificates of residence found	2	
Applications dropped	38	
Applications pending	20	
Total		214

V. RECOMMENDATIONS.

Various suggestions and recommendations are contained in the preceding pages of this report, being in each instance advanced in connection with the treatment of the particular subject to which they apply, and several others which do not naturally fall into place in the text are inserted under this title.

The majority of the recommendations made in the report for 1906 had in contemplation the passage of additional legislation, and some

of those suggestions were incorporated in the new act. Until a fair opportunity for testing the new provisions has been had, the Bureau would hesitate to make any extensive suggestions for additional legislation, and the recommendations concerning immigration proper contained herein relate more particularly to matters which can be arranged, if at all, independently of legislative action. It is apprehended that in some respects the new law will need amendments to harmonize it with more practical lines of administration, but, taken as a whole, it is doubtless a step in advance, and contains many features that will be found of exceeding great value to an efficient protection of the people of the United States against the vicious and diseased of foreign countries. A year's experience with its practical application will probably enable the Bureau to point with certainty to each provision that in any respect is lacking in the elements necessary to make it effective of its apparent intent. With regard to the Chinese exclusion laws, the recommendations herein advanced are principally of the same character as those which have been made for several years past. There has been no additional legislation on this subject, and the Bureau is emphatically of opinion that there should be, the reasons for that belief being explained under the appropriate subtitles of Title II, preceding.

There is inserted at this point, as being the most convenient, a discussion of what the Bureau regards as one of the most important questions now remaining open for consideration and betterment, with regard to the practical and just enforcement of the immigration laws in their chief function—the admission or exclusion of those seeking to enter. From its experience in administering the act of March 3, 1903, the Bureau is convinced that the chief factor in the system of administration provided by law is the board of special inquiry; and, with the extensive additions made by the new law to the excluded classes, and the material manner in which said law has broadened the functions and increased the power of the board, important as that body was before, it becomes doubly so. It is, therefore, more essential than ever that these boards shall be composed of men far above the average in capacity, intelligence, and experience. It is difficult to imagine a more serious duty than that assigned the members of such boards. They are continuously engaged in the rendering of judgments that affect the welfare of human beings, and that incidentally have an incalculable and indefinable but nevertheless essential bearing upon the future of the country itself; for the immigrant of to-day is the citizen of to-morrow, with all that the word "citizen" implies in this free country. Members of these boards should be men qualified by temperament and training for the weighing of evidence and the application of law to the varying circumstances constantly being brought out in the examinations they conduct; they should be men of judicial and discriminating mind, and of large and sympathetic heart—not that the Bureau has a particular quarrel with the boards now serving, which are composed of conscientious officials, doubtless the best material available under the existing order of things, but it believes the time has come when the standard should be raised to the highest point.

The first essential to the accomplishment of that end is to pay a salary commensurate with the magnitude and importance of the duties. A salary equal to that paid in other positions requiring the

exercise of judicial functions should be fixed upon and the Bureau does not believe that $5,000 per annum is too much. A compensation as large or larger is generally paid the judges of our courts engaged in determining questions affecting persons and property—questions which in the average are no more grave than those that come before boards of special inquiry. With a salary commensurate with the position no difficulty should be encountered in securing the services of men of the requisite caliber and attainments. The arrangement above described should be applied at the larger ports, where there would be a constant demand for the services of boards. At the small ports the system now used could be continued, or perhaps that employed in England in enforcing the "aliens act" could be copied to advantage. That plan consists in the designation as board members of a certain number of men prominent in the community, it being understood that the appointment is one of honor and distinction and that a salary sufficient to compensate for the loss of time involved in the discharge of the duties of board members will be paid. When a vessel carrying aliens arrives the board is called together and sits until the cases of all the applicants have been disposed of. In England about $5 a sitting is paid these officials and it is considered a high compliment to be asked by the Government to sit as a member of the board. Our new immigration act makes the decision of a board of special inquiry final in a much larger class of cases than did former acts. With a system of appointing the boards that would give assurance of the placing thereon of men qualified to the highest degree for the discharge of the judicial functions of that body the Government could well afford to extend the power further in that respect, perhaps making the decision final in many, if not all, classes of cases.

The Bureau believes that the Immigration Service has now reached a stage in its development and expansion that calls for the appointment of a corps of special agents, to be attached to the office of the Secretary and to be charged with the duty of exercising functions similar to those of the special agents employed by the Secretary of the Treasury in connection with the enforcement of the customs laws. Such an arrangement would effect a close observation of the vast field service and would tend to a betterment of discipline and morale among the employees. The members of such a force could be kept in close touch with the rulings of the Bureau and Department in immigration and Chinese matters, and by traveling about would be made aware of the practices prevailing at the different ports and in the various districts, so that their employment would also tend to the production of uniform methods of administration.

As the tabular reiteration of the suggestions employed in the last report (pp. 105–107) was found convenient and useful the same device is again adopted.

IMMIGRATION.

Recommendation.	1906 report.	1907 report.
	Page.[a]	*Page.*[a]
1. That legislation be adopted to check violations of the immigration laws by professed seamen; penalizing shipmasters for signing other than bona fide seamen on their crew lists; requiring them to notify immigration officers of the arrival of vessels with aliens in the crew and to prevent the escape into the United States of any member of such crew declared by the immigration officers to be inadmissible	533	131
2. That Public Health and Marine-Hospital surgeons be stationed at the principal foreign ports of embarkation to examine all aliens applying for passage to the United States and thus aid in the prevention of the sale of passage to any who, under the United States immigration laws, can not be permitted to enter this country	539-540	136-137
3. That arrangements be made under which a corps of Government surgeons can be detailed for duty on the larger vessels engaged in transporting aliens to this country, with the object of observing the steerage passengers on the voyage over, thus gaining an accurate knowledge as to their physical and, particularly, their mental condition	.....	136-137
4. That arrangements be made for placing on board a number of the large trans-Atlantic liners female inspectors, thoroughly qualified and equipped with a knowledge of foreign languages, charged with the duty of intermingling with the female steerage passengers and making their acquaintance, the object being thus to assist in preventing the importation of women for immoral purposes	.....	137-138
5. That a comprehensive digest of the immigration law be published in the principal foreign languages and extensively distributed abroad, for the purpose of educating foreign peoples concerning the difficulties which are placed in the way of undesirable immigration to the United States	540	138-139
6. That, either by the adoption of additional legislation or by international agreement, an arrangement be perfected by which the detection of members of the criminal class may be assured—preferably a requirement that, as a prerequisite to examination, aliens shall present passports granted to them by their own governments	.....	138
7. That an international conference on emigration and immigration, for the holding of which provision is made in the new immigration act, be called at the earliest practicable date	537	135-136
8. That a treaty be negotiated with Mexico under which an arrangement concerning immigration through that country and over its transportation companies may be controlled, similar to the agreement now existing with the Canadian steamship and railroad companies	.....	146-147
9. That if suggestion 8 can not be carried out the Mexican border be closed to all aliens except citizens and bona fide residents of Mexico	545	146
10. That, by legislation and treaty, arrangements be perfected for the mutual enforcement in this country and Canada of the immigration laws of each, so that neither country, in administering its own laws, need run counter to the statutes of the other	.....	145
11. That the standard of efficiency and experience as to members of boards of special inquiry be raised; that as a preliminary step thereto the salary of the members of the boards stationed at the large ports be fixed at $5,000 per annum, and that at the smaller ports the present system of detailing inspectors for duty on boards of special inquiry be continued, or else be substituted with the plan now employed in England under the British alien's act	.....	201-202
12. That there be established in the Office of the Secretary a division of special agents to be charged with duties affecting the immigration service, similar to those now performed by the special agents attached to the Office of the Secretary of the Treasury concerning the customs laws	.....	202
13. That immigrant stations be erected at Boston, Philadelphia, and Baltimore, three appropriations of $250,000 each to be made to provide for the starting of the work	547	152-153
14. That appropriations be made for certain improvements emphatically demanded by existing conditions at Ellis Island, notably the construction of a new ferryboat, of a new refrigerating plant, the dredging of a part of the harbor, the rehabilitation of the water-supply system, and the completion of hospital quarters already under construction, and building of additional quarters	545-547	150-152
15. That appropriations be made for the completion of the Angel Island immigrant station at San Francisco and for the purchase or construction of a ferryboat and of a boarding cutter for use at the same port	.....	153-154
16. That an appropriation of $5,000 be made with which to provide hospital accommodations at Honolulu	.....	154

[a] In the consolidated reports of the Department of Commerce and Labor.

CHINESE EXCLUSION.

Recommendation.	1906 report.	1907 report.
	Page.[a]	*Page.*[a]
1. Congress having, in making the last appropriation for the enforcement of the Chinese-exclusion laws, stipulated that the amount so expended shall be drawn from the immigrant fund, it is recommended that when the next appropriation is made the language thereof be such as to authorize the payment of all expenses incident to the enforcement of the Chinese-exclusion laws from the same appropriation and in the same manner as the expenses of regulating immigration, and that the designation of all Chinese inspectors be changed to immigrant inspectors, the object being to effectuate a complete combination of the two branches of the service, which would conduce greatly to the economy and efficiency of administration, as well as remove some real and imaginary causes for complaint	553-554	.....
2. That section 6 of the act approved July 5, 1884, be amended so as to authorize the stationing in China of officers directly responsible to the Department of Commerce and Labor to discharge the duty of investigating and approving certificates issued by the Chinese Government to members of the exempt classes, such officers to be attached to the United States consulates	559-561	174
3. That a provision be incorporated in the exclusion laws under which the minor children of domiciled members of the exempt classes may be admitted to the United States solely for the purpose of joining their parent or parents and for engagement in the exempt pursuits, the purpose being to prevent the introduction and residence here of members of the laboring class who secure admission as minor children	562	176
4. That all restrictions on the departure and return of registered Chinese laborers be removed, so that such persons may leave and reenter the United States merely upon establishing their identity	562-563	176-177
5. That all Chinese now in the United States be registered, under a complete and detailed plan, irrespective of whether they registered under the acts of 1892 and 1893	563-564	177-178
6. That the method of arresting and deporting Chinese found unlawfully in the United States be changed so as to correspond with the plan now so successfully operated with regard to aliens of all other races	564	178
7. That the system for identifying members of the exempt classes in this country, outlined in "Rule 59" of the regulations of May, 1905, be readopted and put into operation	564-565	178-180
8. That the provisions of law regarding Chinese seamen be so amended as to attach a definitely fixed severe penalty to the permitting of the landing of such seamen, irrespective of whether the officers of a vessel connive in the landing, a more severe penalty being provided in case of connivance upon their part	569	183
9. That appropriate legislation be passed to remove all doubt with regard to how the deck of an American vessel is to be considered under the Chinese-exclusion and alien contract-labor laws	569	183
10. That a treaty be negotiated with China under which the entire exclusion policy will be revolutionized, by providing that China shall keep the coolie class from migrating to this country and issue passports only to members of other classes	.....	165-167
11. That legislation be passed fixing a definite rule of evidence to apply to the cases of persons of the Chinese race who apply for admission to the United States on the ground that they were born in this country, requiring that the testimony of other persons than Chinese, or record evidence, or both, shall be submitted	.....	181-182

NATURALIZATION.

1. That the naturalization laws be so amended as to give the Government the right of appeal from decisions granting citizenship to aliens, thus making it possible to bring about a more harmonious construction of the laws than is practicable in the absence of such right	.....	197-198
2. That an amendment be made which will remedy the present possibility of an alien's becoming naturalized at the age of 20 years, inasmuch as honorably discharged sailors, marines, and soldiers (in whose behalf special exceptions otherwise are made) can not be naturalized until they reach the age of 21	.....	198
3. That legislation be had which will harmonize the general terms of the recent naturalization act, sections 2166 and 2174, Revised Statutes, and existing provisions regarding alien seamen in the Navy and marines, and make plain what special concessions it is intended shall be made in favor of such persons when they apply for naturalization	.....	198
4. That provision be made which will actually effect what was the apparent intent of the latter part of section 13 of the naturalization act, and make possible the employment of additional clerical assistance by the clerks of courts when the volume of the work requires it, the Comptroller of the Treasury having held that said provision in section 13 is inoperative	.....	198-199

[a] In the consolidated reports of the Department of Commerce and Labor.

VI. CONCLUSION.

Notwithstanding the enormous increase in the work of the Bureau, it is believed the contents of this report justify the assertion that such work has been well performed and that satisfactory results have been generally attained. This is due to the capacity, intelligence, and devotion to duty of the approximately 1,300 employees attached to the service at large and to the Bureau. This force of employees is efficiently and effectively organized under the control of commissioners of immigration, inspectors in charge, and other administrative officers; and the concerted, harmonious, and well-directed efforts of all have produced the results hereinbefore narrated. Full credit should be allowed each, from the highest in rank to the lowest. In commending its employees the Bureau is always careful not to omit the surgeons of the Public Health and Marine-Hospital Service who are detailed to the performance of very important duties in connection with the examination of aliens arriving at the ports of this country. They constitute a body of efficient, conscientious, and well-equipped professional men, and much credit is due them for the highly satisfactory manner in which they fill assignments that are often arduous and exacting.

In the light of the past and its accomplishments, the Bureau enters upon the new fiscal year with a confident hope, knowing that a continuance of the policies followed heretofore in the performance of the duties assigned it must result from year to year, indeed from month to month, in a nearer approach to the ideal; and that, therefore, it will be able to report each succeeding year more accomplished and less left undone than in the preceding.

Respectfully,

F. P. SARGENT,
Commissioner-General.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

NOTE.—Accompanying the Report of the Commissioner-General of Immigration as printed separately are two charts, as follows:

Chart 1 shows the number of immigrants from the different countries and the total for all countries for each year during the past eighty-eight years.

Chart 2 shows the wave of immigration from all countries during the past eighty-eight years.

REPORT

OF THE

COMMISSIONER OF CORPORATIONS

REPORT

OF THE

COMMISSIONER OF CORPORATIONS.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF CORPORATIONS,
Washington, December 9, 1907.

SIR: I have the honor to submit the report of the Commissioner of Corporations for the fiscal year ended June 30, 1907.

During the fiscal year there have been no changes in the act of February 14, 1903, by which the Bureau was created.

The total appropriations for the Bureau for the year were $185,920, of which $140,620.25 was expended. The appropriations for the fiscal year 1908 are $247,720, and the estimates for the year ending June 30, 1909, are $248,700.

The number of persons employed by the Bureau on June 30, 1907, was 97.

The chief legal work of the Bureau in the fiscal year 1907 has consisted in aiding the United States attorneys and other law officers of the Department of Justice in preparing and prosecuting indictments for offenses against the Elkins law (discriminations in railway rates), brought to light by the Report of the Commissioner of Corporations on the Transportation of Petroleum, issued May 2, 1906. To render this assistance the present Commissioner of Corporations and an assistant have traveled extensively in western New York, northern Illinois, eastern Missouri, western Tennessee, and western Louisiana. The following is a list of said indictments, with the counts thereof, and the status of the cases on December 1, 1907, so far as the Bureau is informed:

District.	Date.	Number of indictments.	Number of counts.	Status of case on Dec. 1, 1907.
Northern Illinois	Aug. 27, 1906	8	6,399	Of these, 3 indictments have been disposed of and a conviction secured on 1,462 counts, under which the defendant, the Standard Oil Co. of Indiana, was fined the maximum fine of $29,240,000.
Western New York	Aug. 10, 1906	2	47	One of these indictments has been tried and the defendant, the New York Central and Hudson River Railroad Co., convicted and fined $15,000.
	Aug. 24, 1906	3	147	
	Aug. 9, 1907	10	1,140	
	Sept. 6, 1907	4	399	
Western Tennessee	Oct. 16, 1906	1	1,524	Demurrer of defendant, Standard Oil Co., overruled, and case awaiting trial.
Eastern Missouri	Nov. 28, 1906	1	76	No action taken since indictment.
Western Louisiana	Jan. 28, 1907	1	32	Do.

Government to deal with such corporations in the main by administrative supervision rather than by judicial procedure; whose methods will be preventive rather than penal; and, most important of all, a system which will afford a permanent practical ground for contact and cooperation between the Government officials charged with this work on the one hand and corporate managers on the other. So great is the complexity and so tremendous the scope of modern industrial machinery that it can be regulated satisfactorily only through such administrative action exercising constant supervision and inspection.

It is believed that the time is ripe for such a system. The Bureau has had increasingly the voluntary cooperation and assistance of most of the large corporations involved in the subject-matter of the Bureau's investigations. This assistance given by the leaders of industry has been very encouraging, especially in its indication of the attitude of many of the ablest men of the country and the attitude of the public at large toward the fundamental objects for which this Bureau was created.

There is no need that such Federal supervision should derogate from the proper powers of the States. The businesses of to-day are transacted under conditions which, from a commercial standpoint, are purely national, with no reference to State lines, but the legal status of these businesses is still delimited almost wholly by State statutes, a discrepancy which has been the cause of many existing evils. Corporate commerce as carried on by those great companies whose operations substantially constitute the whole problem before us is national, and has been deliberately made national; the control over them should, to some extent at least, be also national. The legal conditions should at least be brought to some reasonable correspondence with the business facts, and thus such a Federal system of administrative supervision would merely imply that the Federal Government would attend to those national affairs of interstate commerce which have of recent years come into such prominent existence and which were clearly intrusted to that Government by the Constitution.

Respectfully,

HERBERT KNOX SMITH,
Commissioner of Corporations.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

REPORT

OF THE

COMMISSIONER OF LABOR

REPORT

OF THE

COMMISSIONER OF LABOR.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF LABOR,
Washington, September 16, 1907.

SIR: I have the honor to submit herewith a detailed report of the work of this Bureau during the fiscal year ending June 30, 1907. The report has been made in three parts. The first part relates to the laws under which the Bureau was established and under which it carries on its work; the second relates specifically to the work of the fiscal year ending June 30, 1907, while the third contains a brief description of the contents of each publication made by the Bureau during the period of its existence.

I. ESTABLISHMENT OF THE BUREAU.

The Bureau of Labor was originally established as a bureau of the Department of the Interior by an act approved June 27, 1884. This act provided that the "Commissioner shall collect information on the subject of labor, its relation to capital, the hours of labor, and the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity." In obedience to this law, the Bureau was organized in January, 1885, and shortly thereafter, on February 4, 1885, the policy of the office was declared, in a letter addressed by the Commissioner of Labor to the honorable Secretary of the Interior, as follows:

> It should be remembered that a bureau of labor can not solve industrial or social problems, nor can it bring direct returns in a material way to the citizens of the country, but its work must be classed among educational efforts, and by judicious investigations and the fearless publication thereof it may and should enable the people to comprehend more clearly and more fully many of the problems which now vex them.

Four years after its organization as a bureau of the Department of the Interior, during which time it had issued four annual reports covering the information collected and collated, as required by the organic act, the Congress established a Department of Labor, independent of any of the Executive Departments. The act establishing the Department of Labor was approved June 13, 1888, and provided—

> That there shall be at the seat of Government a Department of Labor, the general design and duties of which shall be to acquire and diffuse among the

people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of that word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity.

The act defined the organization of the Department and the duties of the Commissioner, and further provided—

SEC. 7. That the Commissioner of Labor, in accordance with the general design and duties referred to in section one of this act, is specially charged to ascertain, at as early a date as possible, and whenever industrial changes shall make it essential, the cost of producing articles at the time dutiable in the United States in leading countries where such articles are produced, by fully specified units of production, and under a classification showing the different elements of cost or approximate cost of such articles of production, including the wages paid in such industries per day, week, month, or year, or by the piece, and hours employed per day, and the profits of the manufacturers and producers of such articles, and the comparative cost of living and the kind of living. "It shall be the duty of the Commissioner also to ascertain and report as to the effect of the customs laws, and the effect thereon of the state of the currency in the United States on the agricultural industry, especially as to its effect on mortgage indebtedness of farmers," and what articles are controlled by trusts or other combinations of capital, business operations, or labor, and what effect said trusts or other combinations of capital, business operations, or labor, have on production and prices. He shall also establish a system of reports by which, at intervals of not less than two years, he can report the general conditions, so far as production is concerned, of the leading industries of the country. The Commissioner of Labor is also specially charged to investigate the causes of and facts relating to all controversies and disputes between employers and employees as they may occur, and which may tend to interfere with the welfare of the people of the different States, and report thereon to Congress. The Commissioner of Labor shall also obtain such information upon the various subjects committed to him as he may deem desirable from different foreign nations, and what, if any, convict-made goods are imported into this country, and if so, from whence.

SEC. 8. That the Commissioner of Labor shall annually make a report in writing to the President and Congress of the information collected and collated by him, and containing such recommendations as he may deem calculated to promote the efficiency of the Department. He is also authorized to make special reports on particular subjects whenever required to do so by the President or either House of Congress, or when he shall think the subject in his charge requires it. He shall, on or before the fifteenth day of December in each year, make a report in detail to Congress of all moneys expended under his direction during the preceding fiscal year.

SEC. 9. That all laws and parts of laws relating to the Bureau of Labor created under the act of Congress approved June twenty-seventh, eighteen hundred and eighty-four, so far as the same are applicable and not in conflict with this act, and only so far, are continued in full force and effect, and the Commissioner of Labor appointed under said act approved June twenty-seventh, eighteen hundred and eighty-four, and all clerks and employees in the Bureau of Labor authorized to be appointed by said act or subsequent acts, shall continue in office and employment as if appointed under the provisions of this act, and until the Commissioner of Labor, other officer, clerks, and employees are appointed and qualified as herein required and provided; and the Bureau of Labor, as now organized and existing, shall continue its work as the Department of Labor until the Department of Labor shall be organized in accordance with this act; and the library, records, and all property now in use by the said Bureau of Labor are hereby transferred to the custody of the Department of Labor hereby created, and on the organization of the Department of Labor on the basis of this act the functions of the Bureau of Labor shall cease.

Under this act the Department of Labor issued 14 annual reports of the information collected and collated in accordance with the organic act, 9 special reports, and a number of miscellaneous reports, many of which were made in compliance with the special direction of

Congress. Since November, 1895, the Bureau has also published a bimonthly bulletin, in accordance with a law approved March 2 of the same year, as follows:

The Commissioner of Labor is hereby authorized to prepare and publish a bulletin of the Department of Labor as to the condition of labor in this and other countries, condensations of State and foreign labor reports, facts as to conditions of employment, and such other facts as may be deemed of value to the industrial interests of the country, and there shall be printed one edition of not exceeding 10,000 copies of each issue of said bulletin for distribution by the Department of Labor.

In accordance with the plan adopted the Bulletin has at least four regular departments of information in each issue, as follows:

First. The results of original investigations conducted by the Bureau or its agents and experts.

Second. A digest of State labor reports.

Third. A digest of foreign labor and statistical documents.

Fourth. The reproduction immediately after their passage of new laws that affect the interests of the working people, whether enacted by Congress or by State legislatures; and accompanying this there is the reproduction of the decisions of courts interpreting labor laws or passing upon any subject which involves the relations of employer and employee.

Under the act approved February 14, 1903, establishing a new Executive Department, to be known as the Department of Commerce and Labor, it was provided that, among other offices, the existing Department of Labor be placed under the jurisdiction and supervision of the new Department, this provision to take effect and be in force July 1, 1903. In accordance with the provisions of this act, the former Department of Labor, on July 1, 1903, became a bureau of the Department of Commerce and Labor. Inasmuch as no provision was made for any change in its general design and duties, its work has been carried on during the past year along practically the same lines as formerly.

II. OPERATIONS DURING THE FISCAL YEAR 1907.

During the fiscal year ending June 30, 1907, the Bureau of Labor issued its twenty-first annual report—that for 1906. This report presents the results of an investigation of strikes and lockouts in the United States for the years 1901 to 1905, inclusive, together with summaries covering the twenty-five-year period, 1881 to 1905.

The report contains many summary tables, as well as many special tables and much text discussion relating to the most significant features of strikes and lockouts. Special chapters give the statistics of strikes and lockouts in foreign countries for a period of years and the law relating to strikes, blacklisting, boycotting, etc., in the various States and in the United States.

This is the fourth report issued by the Bureau relating to strikes and lockouts, the Third Annual Report covering the years 1881 to 1886, the Tenth the period from January 1, 1887, to June 30, 1894, and the Sixteenth the period from July 1, 1894, to December 31, 1900.

It is believed that every labor disturbance of importance occurring in the United States from 1881 to 1905 has been included in this

report. The general tables show that, excluding strikes and lockouts of less than one day's duration, there were 36,757 strikes and 1,546 lockouts in the United States during this period of twenty-five years, or a total of 38,303 disputes. Strikes occurred in 181,407 establishments and lockouts in 18,547 establishments. A total of 6,728,048 persons went on strike and 716,231 were locked out, and the number of employees, including strikers, thrown out of work by strikes was 8,703,824 and the number thrown out of work by lockouts was 825,610. The average duration of strikes per establishment was 25.4 days and of lockouts 84.6.

During the past year the Bulletin of the Bureau was issued regularly every other month. For the fiscal year the issues were Nos. 65, 66, and 67 of volume 13, and Nos. 68, 69, and 70 of volume 14. The Bulletin has contained, in addition to one or more special articles in each number, digests of recent reports of State bureaus of labor statistics, digests of recent foreign statistical publications, decisions of courts affecting labor, and laws of various States relating to labor. The special articles included in the foregoing numbers of the Bulletin are as follows:

Bulletin 65 contained "Wages and hours of labor in manufacturing industries, 1890 to 1905," and "Retail prices of food, 1890 to 1905." These two articles are in continuation of a regular series of Bulletin articles (begun in Bulletin 59) to be published annually, supplementing and continuing, respectively, the Nineteenth Annual Report, relating to wages and hours of labor, 1890 to 1903, and that portion of the Eighteenth Annual Report which relates to retail prices of food, 1890 to 1903.

The work of the Bureau, so far as the preparation of Bulletin 65 was concerned, was limited to collecting and preparing for presentation data for the year 1905. Data relative to wages and hours of labor in 1905 were secured covering 349 occupations, and a total number of 4,121 establishments engaged in 42 industries. The compilation of retail prices of food included 6,193 schedules or statements of prices from 999 firms doing business in the principal industrial localities in 39 States, including the District of Columbia.

Bulletin 66 was a reprint of the third report upon the commercial, industrial, social, educational, and sanitary condition of the laboring classes of the Territory of Hawaii, which was published as a special report in the preceding year. As no provision was made by Congress for printing the report for general distribution, it was thought proper to reprint it as one of the regular Bulletins of the Bureau.

Bulletin 67 contained "Conditions of entrance to the principal trades" and "Cost of industrial insurance in the District of Columbia." The first article is a study of the changes in the conditions of entrance to the principal skilled occupations that have resulted from the displacement of hand processes by highly developed machine methods and the consequent minute subdivision of labor in many industries. The second article gives the results of an investigation in the District of Columbia into the cost of insurance when purchased in small amounts and for small weekly payments, as is necessary with many working people whose earning capacity is small, as compared with the cost when purchased in the ordinary way and paid for quarterly, semiannually, or annually.

Bulletin 68 contained "Free public employment offices in the United States" and "Laws of foreign countries relating to employees on railroads." The first article presents the results of a comprehensive investigation into the operations of all the free public employment offices supported by the States or the cities and designed to bring employee and employer together for the purpose of furnishing employment to the former and help to the latter. The second article gives the substance of the laws and decrees in force in the principal foreign countries which have for their purpose the fixing of the conditions of employees engaged in the operation of railways, including provisions as to the conditions of employment and discharge, the employment of women, the regulation of hours of labor and of holidays, the determination of wages, the right of organization, penalties for the abandonment of service, etc.

Bulletin 69 contained "Wholesale prices, 1890 to 1906," bringing down to the end of 1906 the results of the study of the subject, the publication of which was begun in the Bulletin of March, 1902, and continued in the March Bulletin of each year since. The study covers 258 series of quotations, representing all classes of staple commodities.

Bulletin 70 contained "The Italian on the land—a study in immigration," "A short history of labor legislation in Great Britain," and "The British workmen's compensation acts." The first article gives the results of a study of Italian immigrants who have settled in Hammonton, N. J., and have become successful small farmers or workers in a typical American rural community. The second article gives a short sketch of the various steps that have been taken in Great Britain to protect by legislation men, women, and children working in factories and workshops and to ameliorate working conditions. The third article is devoted to a study of the development of legislation providing for compensation for workmen injured in their employment—the so-called Employers' Liability and Workmen's Compensation Acts.

In addition to the preparation and compilation of the foregoing report and bulletins which cover the publications of the last fiscal year the force of the Bureau has been engaged in the collection and preparation of data for a number of future reports and bulletins. The annual report for 1907 will relate to workingmen's insurance and employers' liability in foreign countries.

The investigation of woman and child labor as ordered by Congress has been taken up and the subject carefully studied and some preliminary investigating work done, with the view of perfecting the plans preparatory to the employment of the full force of experts upon the work.

A number of articles, as noted below, for publication in the Bulletin of the Bureau are now ready or in course of preparation, and a considerable amount of material to be used in future numbers of the Bulletin has already been prepared.

During the year data for 1906 were collected from manufacturers relative to wages and hours of labor in manufacturing industries and from retail merchants in regard to the retail prices of the principal articles of food, for publication in the Bulletin for July, 1907 (No. 71), in continuation of the reports already made covering the period 1890 to 1904.

In later numbers of the Bulletin there will appear special articles upon the following subjects:

Italian, Slavic, and Hungarian unskilled immigrant laborers in the United States.
Mexican labor and labor conditions in the Southwest.
The Negroes of Lowndes County, Alabama.
Labor conditions on cotton, rice, and sugar plantations in the Southwest.
Labor conditions in the production of wheat in the West.
Foreign methods of dealing with unemployment.
Charity relief in the District of Columbia.
Economic condition of the Jews in Russia.

III. PUBLICATIONS OF THE BUREAU.

ANNUAL REPORTS.

Immediately following is given a brief description of the contents of the various reports, bulletins, etc., issued since the organization of the Bureau in 1885:

The First Annual Report relates to industrial depressions. The information for this report was collected and classified by a force entirely inexperienced and with a small amount of money at command. The report, however, gave the Bureau of Labor a standing and convinced its friends that with proper financial equipment it could handle any reasonable investigation that might be committed to it. The statistics published in that report bore upon the various features involved in depressions. It brought out for the first time the relation of nations to each other as producers and the various influences bearing upon discontent, and gave a summary of the causes and a classification as to regularity of previous depressions, etc., every page bearing directly or indirectly upon the condition and the welfare of the working men and women of the country.

The Second Annual Report relates to convict labor as carried on in the penal institutions of the country. This investigation was directed by a joint resolution of Congress. It comprehends all the facts ascertainable relating to the employment of convicts in every institution of whatever grade in the United States in which the inmates were in any way employed on any kind of productive labor. The results are exceedingly valuable. They bring out the clear and well-defined relations between convict labor and other labor—the importance of it, the character of it, the relation of cost to product, and all the other features which one might expect as bearing upon the subject. The report also contains a most valuable digest of the laws of States and of countries in the past and for the present bearing upon the employment of convicts. All the methods in vogue are fully and freely described and discussed and their advantages and disadvantages brought into relation.

The Third Annual Report is the result of an investigation relating to strikes and lockouts occurring in the United States during the years 1881 to 1886, inclusive. The report is exhaustive and complete, so far as all the material facts relating to strikes and lockouts are concerned. The report contains a digest of laws relating to strikes and boycotts, the course of the change of sentiment in judicial decisions on conspiracies, and a brief history of the great strikes of the past.

The Fourth Annual Report relates to working women in 22 of the larger cities of the United States. It did not undertake to investigate the work of women in the lowest industrial pursuits, nor in the professions, nor even in semiprofessional callings, but gathered all the facts as to wages, expenditures, health, moral and sanitary surroundings and conditions, and results of work for those women popularly known as "shop girls"—perhaps the middle class of working women. The facts were collected almost entirely by women, who took every means to verify the statements made to them, and the result was a body of facts relating to more than 17,000 women. The report also comprehends what was being done in the cities canvassed in the way of clubs, homes, etc., to assist working women when out of employment or when otherwise requiring temporary encouragement.

The Fifth Annual Report is upon the railroad labor of the country, and by it the results as to pay and the efforts of companies to assist their employees, the liability for accidents, and other features are brought out. Railroad corporations gave into the hands of the agents of the Bureau their vouchers and pay rolls, from which were taken all the facts relating to wages and earnings. When it is understood that there were nearly a million employees of the different railroad corporations in the country the importance of securing and publishing the facts relating to them becomes apparent. This report contains data of the greatest importance in the consideration of labor questions. The migration of labor—its tendency to change position and to seek new fields—was very clearly brought out and statistically stated.

The Sixth and Seventh Annual Reports relate primarily to the cost of producing iron and steel and cognate products and the textiles and glass in this and other countries. This work was ordered by Congress in the organic law of the Bureau. It took three and a half years of the most laborious efforts to collect and tabulate the information. The primary object of securing the information relative to the cost of production, so far as Congressional action is concerned, was to ascertain the difference between the cost of producing articles abroad and in this country, that a more scientific conclusion might be reached relative to the rates of duties necessary for the purposes of equalization. Incidentally, however, along with the collection of the data required by Congress, the wages of those working in the industries comprehended by the investigation, as stated, and the cost of the living of workers in these industries were considered, and the bulk of the reports (the sixth and seventh) relate to wages and the cost of living, comprehending in the latter feature the facts for more than 16,000 families.

The Eighth Annual Report was specially ordered by Congress, and relates to industrial education in different countries. It takes up the status of industrial education in the United States, Austria, Belgium, France, Germany, Great Britain, Italy, Russia, the Scandinavian countries, and Switzerland. It deals also with the kindergarten in relation to manual training, manual training in conjunction with bookwork, manual training and trade instruction in reformatories, and the effect of manual training and trade instruction upon the individual, and it contains an extensive bibliography of works treating of industrial education. This report has been of great

value in States where the subject of industrial education in any form has been discussed by the legislatures.

The Ninth Annual Report relates to building and loan associations, including under that general title all associations the objects of which are similar to those of building and loan associations, the general subject including cooperative banks, mutual loan associations, homestead aid associations, savings fund and loan associations, and other similar institutions. The work is comprehensive, and covers all the associations in the United States as they existed in 1892–93, with full tables giving the facts as to numbers, series, shares, number and sex of shareholders, etc. It also contains special interest-rate tables and average premium-rate tables, with a description of the various plans adopted for the payment of premiums and for the distribution of profits, as well as withdrawal plans. The report also contains a chapter giving general legislation relating especially to building and loan associations.

The Tenth Annual Report is a continuation of the Third, relating to strikes and lockouts, and is in two volumes, Volume I containing, besides an analysis of all tables, the detail tables of all strikes and lockouts occurring in the United States from January 1, 1887, to June 30, 1894. Volume II contains summaries of the detail tables given in Volume I. The analysis reclassifies and resummarizes the facts contained in the Third Annual Report, giving strikes and lockouts from January 1, 1881, to December 31, 1886. The Tenth, therefore, comprehends all strikes and lockouts from 1881 to June 30, 1894.

The Eleventh Annual Report is the result of an investigation concerning the work and wages of men, women, and children, classifying the occupations and earnings of women and children and of men, and dealing with the relative efficiency of women and children and of men engaged in the same occupation, the comparison of earnings of women and children and of men of the same grade of efficiency, the reasons usually given for the employment of women and girls, the hours per week worked in establishments, and the different occupations followed by women and girls.

The Twelfth Annual Report is the result of instructions from Congress authorizing the Commissioner of Labor to make an investigation relating to the economic aspects of the liquor problem. The report gives the production and consumption of liquors, the traffic in liquors, the revenue derived from the production of and the traffic in the same, the experience and practice of employers relative to the use of intoxicants, and various tables relating to license fees or special taxes, fines, etc. It also gives the laws regulating the revenue derived from liquor production and traffic in the different States. The report is for the year ending June 30, 1897.

The Thirteenth Annual Report, entitled Hand and Machine Labor, is also the result of an investigation authorized by joint resolution of Congress, under the provisions of which the Commissioner of Labor was authorized and directed to investigate and report upon the effect of the use of machinery upon labor and the cost of production, the relative productive power of hand and machine labor, the cost of manual and machine power as they are used in the productive industries, etc. This resolution was approved August 15, 1894, and after between three and four years of very difficult labor the results of the

investigation were reported in October, 1898, in the Thirteenth Annual Report. The work was published in two volumes.

The Fourteenth Annual Report, published in December, 1899, relates to water, gas, and electric-light plants under private and municipal ownership, and was designed to bring out the essential facts relating to such works in the United States. The report is the result of an agreement by the various commissioners of labor at their annual convention held in Albany in June, 1896. It was impossible to make such a report comprehensive in all its details, yet the Bureau was able to bring out the facts for the representative private and municipal works under the various designations as they existed in the United States at the time of the investigation.

The Fifteenth Annual Report is a compilation of the wages and hours of labor in the principal commercial countries of the world for as many years as possible, the facts being taken from authenticated official reports of the countries involved in the compilation. In many countries the quotations of rates run back many years, and in all countries, so far as possible, they are brought down to the summer of 1900.

The Sixteenth Annual Report covers the statistics of strikes and lockouts from June 30, 1894 (the date at which the investigation resulting in the Tenth Annual Report ended), to December 31, 1900. The report includes also the data contained in the third and tenth reports, thus furnishing an exhibit of the strikes and lockouts in the United States from January 1, 1881, to December 31, 1900, a period of twenty years. A history of strikes prior to 1880, and also the attitude of the courts relative to conspiracy, etc., are given.

The Seventeenth Annual Report relates to trade and technical education in the United States and in the principal European countries. Besides very full details in regard to the schools, the report gives the results of special inquiries directed to ascertaining the influence of the schools upon the pupils, upon apprenticeship, and upon any industries, as well as the attitude of employers, of school graduates, and of labor unions toward industrial education. This second report upon industrial education was made in response to many urgent requests.

The Eighteenth Annual Report presents the results of an extended investigation into the cost of living of workingmen's families and the retail prices for the years 1890 to 1903 of the principal staple articles of food used by such families. The object of the investigation into cost of living was to determine the cost of housing, fuel, lighting, food, clothing, etc., in the ordinary family in the United States. The object of the investigation into retail prices was to determine the changes in the prices of the staple articles of food for a period of years, and thereby to determine as nearly as possible the changes in the cost of living in the several years covered.

The Nineteenth Annual Report presents the results of an extensive investigation into the wages and hours of labor in the leading manufacturing and mechanical industries of the United States during the period from 1890 to 1903, inclusive. This investigation was designed to cover thoroughly the principal distinctive occupations in the leading industries belonging to this large industrial group in all sections of the country, with a view to securing data which would be repre-

sentative of conditions and show the trend of wages and hours of labor during the period covered.

The Twentieth Annual Report presents the results of an extensive investigation of the penal and reformatory institutions of the United States. The primary object of the investigation was to determine the number of convicts employed in productive labor, the industries in which they were at work, the systems under which their work was done, the value of their labor, the value of the product turned out by them, and the number of free laborers that would be required to perform the same amount of work. The report covers all penal and reformatory institutions in the United States in which productive labor to the value of $1,000 was performed within the year included in the investigation.

The Twenty-first Annual Report continues the statistics of strikes and lockouts from December 31, 1900 (the date at which the investigation resulting in the Sixteenth Annual Report ended), to December 31, 1905. The report gives also in the form of summaries the statistics of the earlier reports of the Bureau relating to strikes and lockouts, thus furnishing an exhibit of the strikes and lockouts in the United States for the twenty-five years, 1881 to 1905. Chapters are also devoted to strikes and lockouts in foreign countries and to the law relating to strikes, blacklisting, boycotts, etc.

SPECIAL REPORTS.

The first of the special reports published by the Bureau is entitled "A Report upon the Statistics of and Relating to Marriage and Divorce," and was sent to Congress in 1889 under special provision of an act of Congress to enable the Commissioner to make the report. This document covers the statistics of marriage and divorce in the United States for twenty years, from 1867 to 1886, inclusive. The statutory regulations governing marriage and divorce in the various States are also given at length. An appendix comprehends also statistics and laws of other countries. To make this report required the collection of data from libels for divorce and divorce dockets of more than 2,600 courts in the United States having divorce jurisdiction.

The Second Special Report is one that has been in very great demand. It was originally published in 1892 and comprehended the labor laws of the United States Government and of the different States, giving such laws in full, together with annotations relative to decisions of courts affecting them. By a concurrent resolution adopted by Congress March 5, 1896, a second and revised edition of the Second Special Report was published. A third edition, again revised, has been issued as the Tenth Special Report.

The Third Special Report is simply an analysis and index of all State labor reports that had been published up to 1893, and was made with special reference to the needs of the Bureau. No subsequent analysis has been made, but an index of the contents of the various annual and biennial reports of the States having bureaus of statistics of labor or similar offices has been prepared to supply the needs of the Bureau itself and those of the various libraries of the country.

The Fourth Special Report relates to compulsory insurance in Germany. The origin and development of compulsory insurance are set forth, and the laws governing insurance against sickness, accident,

and old age and invalidity are given in full, with analytical summaries. The relation of the system of compulsory insurance to wages and to public charity is also examined.

The Fifth Special Report relates to the Gothenburg system of regulating the liquor traffic. The history of the liquor legislation in Sweden and Norway is given in detail, leading up to the development of the Gothenburg system. The economic and social results of the system are also shown.

The Sixth Special Report, prepared in compliance with a resolution of the Senate, relates to the phosphate industry in the United States, giving the facts in regard to cost of production, mining, wages, labor, etc.

The Seventh Special Report, prepared in compliance with a joint resolution of Congress, relates to the slums of the cities of New York, Chicago, Philadelphia, and Baltimore. The report is a careful study of certain slum portions of these cities as regards nativity, sex, illiteracy, occupations, earnings, housing conditions, health, criminal records, etc.

The Eighth Special Report relates to the housing of the working people in the United States and various European countries. The insanitary conditions which have led up to legislative action are set forth at length, and also the sanitary laws and building regulations which have been found necessary to deal with these conditions. Many plans, with detailed descriptions, are given of houses and tenements which have been erected to improve living conditions.

The Ninth Special Report is upon the Italians in the city of Chicago, and is a study in detail of the social and economic conditions of the Italians in certain populous sections of that city. It furnishes much material valuable for use in the consideration of the subject of immigration.

The Tenth Special Report relates to the labor laws of the United States and the various States, and is a new edition, completely revised, of the Second Special Report, issued first in 1892 and again in 1896. The report is annotated by references to decisions of courts bearing upon the various laws.

The Eleventh Special Report is a study of the subject of the regulation and restriction of output. The report will throw valuable light upon many of the questions arising with the introduction of new machinery and tools and the fixing of rates of pay, especially where the pay is by the piece. The report relates to Great Britain as well as to the United States.

The Twelfth Special Report relates to coal-mine labor in the five leading coal and lignite producing countries of Europe—Austria, Belgium, France, Germany, and Great Britain—and is an exhaustive compilation from official and other authoritative publications of the statistical and descriptive matter covering the subject.

In addition to the numbered special reports, three reports have been made by the Bureau of Labor under the provisions of the act of April 30, 1900, "to provide a government for the Territory of Hawaii," relative to the commercial, industrial, social, educational, and sanitary condition of the laboring classes of the Territory. The first of these reports relates to the year 1901, the second to the year 1902, and the third to the year 1905. Hereafter, under the amended law, reports will be made every five years.

Another report relates to labor disturbances in Colorado. The report comprehends an exhaustive history of labor disturbances in that State during the period of twenty-five years—from 1880 to 1904, inclusive.

Pursuant to a resolution of the Committee on Labor of the House of Representatives, an investigation and a report were made in the year 1905 upon H. R. 4064, entitled "A bill limiting the hours of daily service of laborers and mechanics employed upon work done for the United States, or for any Territory, or for the District of Columbia, and for other purposes."

BULLETINS.

In addition to the annual and special reports just enumerated, the Bureau has issued since November, 1895, a bimonthly bulletin. To the end of the fiscal year 70 numbers have been issued. The leading articles in these bulletins are as follows:

No. 1. Private and public debt in the United States, by George K. Holmes.
Employer and employee under the common law, by V. H. Olmsted and S. D. Fessenden.
No. 2. The poor colonies of Holland, by J. Howard Gore, Ph. D.
The industrial revolution in Japan, by William Eleroy Curtis.
Notes concerning the money of the United States and other countries, by W. C. Hunt.
The wealth and receipts and expenses of the United States, by W. M. Steuart.
No. 3. Industrial communities: Coal Mining Company of Anzin, by W. F. Willoughby.
No. 4. Industrial communities: Coal Mining Company of Blanzy, by W. F. Willoughby.
The sweating system, by Henry White.
No. 5. Convict labor.
Industrial communities: Krupp Iron and Steel Works, by W. F. Willoughby.
No. 6. Industrial communities: Familistère Society of Guise, by W. F. Willoughby.
Cooperative distribution, by Edward W. Bemis, Ph. D.
No. 7. Industrial communities: Various communities, by W. F. Willoughby.
Rates of wages paid under public and private contract, by Ethelbert Stewart.
No. 8. Conciliation and arbitration in the boot and shoe industry, by T. A. Carroll.
Railway relief departments, by Emory R. Johnson, Ph. D.
No. 9. The padrone system and padrone banks, by John Koren.
The Dutch Society for General Welfare, by J. Howard Gore, Ph. D.
No. 10. Condition of the Negro in various cities.
Building and loan associations.
No. 11. Workers at gainful occupations at the censuses of 1870, 1880, and 1890, by W. C. Hunt.
Public baths in Europe, by Edward Mussey Hartwell, Ph. D., M. D.
No. 12. The inspection of factories and workshops in the United States, by W. F. Willoughby.
Mutual rights and duties of parents and children, guardianship, etc., under the law, by F. J. Stimson.
The municipal or cooperative restaurant of Grenoble, France, by C. O. Ward.
No. 13. The anthracite mine laborers, by G. O. Virtue, Ph. D.
No. 14. The Negroes of Farmville, Va.: A social study, by W. E. B. Du Bois, Ph. D.
Incomes, wages, and rents in Montreal, by Herbert Brown Ames, B. A.
No. 15. Boarding homes and clubs for working women, by Mary S. Fergusson.
The trade-union label, by John Graham Brooks.
No. 16. The Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.

No. 17. Brotherhood relief and insurance of railway employees, by E. R. Johnson, Ph. D.
The nations of Antwerp, by J. Howard Gore, Ph. D.
No. 18. Wages in the United States and Europe, 1870 to 1898.
No. 19. The Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
Mutual relief and benefit associations in the printing trade, by W. S. Waudby.
No. 20. Condition of railway labor in Europe, by Walter E. Weyl, Ph. D.
No. 21. Pawnbroking in Europe and the United States, by W. R. Patterson, Ph. D.
No. 22. Benefit features of American trade unions, by Edward W. Bemis, Ph. D.
The Negro in the black belt: Some social sketches, by W. E. B. Du Bois, Ph. D.
Wages in Lyon, France, 1870 to 1896.
No. 23. Attitude of women's clubs, etc., toward social economics, by Ellen M. Henrotin.
The production of paper and pulp in the United States from January 1 to June 30, 1898.
No. 24. Statistics of cities.
No. 25. Foreign labor laws: Great Britain and France, by W. F. Willoughby.
No. 26. Protection of workmen in their employment, by Stephen D. Fessenden.
Foreign labor laws: Belgium and Switzerland, by W. F. Willoughby.
No. 27. Wholesale prices: 1890 to 1899, by Roland P. Falkner, Ph. D.
Foreign labor laws: Germany, by W. F. Willoughby.
No. 28. Voluntary conciliation and arbitration in Great Britain, by J. B. McPherson.
System of adjusting wages, etc., in certain rolling mills, by J. H. Nutt.
Foreign labor laws: Austria, by W. F. Willoughby.
No. 29. Trusts and industrial combinations, by J. W. Jenks, Ph. D.
The Yukon and Nome gold regions, by S. C. Dunham.
Labor Day, by Miss M. C. de Graffenried.
No. 30. Trend of wages from 1891 to 1900.
Statistics of cities.
Foreign labor laws: Various European countries, by W. F. Willoughby.
No. 31. Betterment of industrial conditions, by V. H. Olmsted.
Present status of employers' liability in the United States, by S. D. Fessenden.
Condition of railway labor in Italy, by Dr. Luigi Einaudi.
No. 32. Accidents to labor as regulated by law in the United States, by W. F. Willoughby.
Prices of commodities and rates of wages in Manila.
The Negroes of Sandy Spring, Md.: A social study, by W. T. Thom, Ph. D.
The British workmen's compensation act and its operation, by A. Maurice Low.
No. 33. Foreign labor laws: Australasia and Canada, by W. F. Willoughby.
The British conspiracy and protection of property act and its operation, by A. Maurice Low.
No. 34. Labor conditions in Porto Rico, by Azel Ames, M. D.
Social economics at the Paris Exposition, by Prof. N. P. Gilman.
The workmen's compensation act of Holland.
No. 35. Cooperative communities in the United States, by Rev. Alexander Kent.
The Negro landholder of Georgia, by W. E. B. Du Bois, Ph. D.
No. 36. Statistics of cities.
Statistics of Honolulu, Hawaii.
No. 37. Railway employees in the United States, by Samuel McCune Lindsay, Ph. D.
The Negroes of Litwalton, Va.: A social study of the "Oyster Negro," by William Taylor Thom, Ph. D.
No. 38. Labor conditions in Mexico, by Walter E. Weyl, Ph. D.
The Negroes of Cinclare Central Factory and Calumet Plantation, La., by J. Bradford Laws.
No. 39. Course of wholesale prices, 1890 to 1901.
No. 40. Present condition of the hand-working and domestic industries of Germany, by Henry J. Harris, Ph. D.
Workmen's compensation acts of foreign countries, by Adna F. Weber.

No. 41. Labor conditions in Cuba, by Victor S. Clark, Ph. D.
Beef prices, by Fred C. Croxton.
No. 42. Statistics of cities.
Labor conditions in Cuba.
No. 43. Report to the President on anthracite coal strike, by Carroll D. Wright.
No. 44. Factory sanitation and labor protection, by C. F. W. Doehring, Ph. D.
No. 45. Course of wholesale prices, 1890 to 1902.
No. 46. Report of Anthracite Coal Strike Commission.
No. 47. Report of the Commissioner of Labor on Hawaii.
No. 48. Farm colonies of the Salvation Army, by Commander Booth Tucker.
The Negroes of Xenia, Ohio, by Richard R. Wright, jr., B. D.
No. 49. Cost of living.
Labor conditions in New Zealand, by Victor S. Clark, Ph. D.
No. 50. Labor unions and British industry, by A. Maurice Low.
Land values and ownership in Philadelphia, by A. F. Davies.
No. 51. Course of wholesale prices, 1890 to 1903.
The union movement among coal-mine workers, by Frank J. Warne, Ph. D.
No. 52. Child labor in the United States, by Hannah R. Sewall, Ph. D.
No. 53. Wages and cost of living.
No. 54. The working of the United States Bureau of Labor, by Carroll D. Wright.
Bureaus of statistics of labor in the United States, by G. W. W. Hanger.
Bureaus of statistics of labor in foreign countries, by G. W. W. Hanger.
The value and influence of labor statistics, by Carroll D. Wright.
Strikes and lockouts in the United States, 1881 to 1900, by G. W. W. Hanger.
Wages in the United States and Europe, 1890 to 1903, by G. W. W. Hanger.
Cost of living and retail prices in the United States, 1890 to 1903, by G. W. W. Hanger.
Wholesale prices in the United States, 1890 to 1903, by G. W. W. Hanger.
Housing of the working people in the United States by employers, by G. W. W. Hanger.
Public baths in the United States, by G. W. W. Hanger.
Trade and technical education in the United States.
Hand and machine labor in the United States.
Labor legislation in the United States, by G. A. Weber.
Labor conditions in Hawaii.
No. 55. Building and loan associations in the United States, by G. W. W. Hanger.
Revival of handicrafts in America, by Max West, Ph. D.
No. 56. Influence of trade unions on immigrants, by Carroll D. Wright.
Labor conditions in Australia, by Victor S. Clark, Ph. D.
No. 57. Course of wholesale prices, 1890 to 1904.
Street-railway employment in the United States, by Walter E. Weyl, Ph. D.
No. 58. Labor conditions in the Philippines, by Victor S. Clark, Ph. D.
Labor conditions in Java, by Victor S. Clark, Ph. D.
The new Russian workingmen's compensation act, by I. M. Rubinow.
No. 59. Wages and hours of labor in manufacturing industries, 1890 to 1904.
Retail prices of food, 1890 to 1904.
Laws relating to child labor in European countries.
No. 60. Government industrial arbitration, by Leonard W. Hatch, A. M.
The eight-hour law and enforced labor contracts in the Panama Canal Zone.
No. 61. Labor conditions in Porto Rico, by Walter E. Weyl, Ph. D.
Early organization of printers, by Ethelbert Stewart.
No. 62. Municipal ownership in Great Britain, by Frederic C. Howe, Ph. D.
Conciliation in the stove industry, by John P. Frey and John R. Commons.
Laws relating to the employment of children in the United States.
No. 63. Course of wholesale prices, 1890 to 1905.
No. 64. Conditions of living among the poor, by S. E. Forman.
Benefit features of British trade unions, by Walter E. Weyl, Ph. D.
No. 65. Wages and hours of labor in manufacturing industries, 1890 to 1905.
Retail prices of food, 1890 to 1905.

No. 66. Third report of the Commissioner of Labor on Hawaii.
No. 67. Conditions of entrance to the principal trades, by Walter E. Weyl, Ph. D., and A. M. Sakolski, Ph. D.
Cost of industrial insurance in the District of Columbia, by S. E. Forman.
No. 68. Free public employment offices in the United States, by J. E. Conner, Ph. D.
Laws of foreign countries relating to employees on railroads, by Lindley D. Clark, A. M., LL. M.
No. 69. Wholesale prices, 1890 to 1906.
No. 70. The Italian on the land: A study in immigration, by Emily Fogg Meade.
A short history of labor legislation in Great Britain, by A. Maurice Low.
The British workmen's compensation acts, by Launcelot Packer, B. L.

Respectfully,

CHAS. P. NEILL,
Commissioner.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

REPORT

OF THE

CHIEF OF THE BUREAU OF STATISTICS

REPORT

OF THE

CHIEF OF THE BUREAU OF STATISTICS.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF STATISTICS,
Washington, November 19, 1907.

SIR: I have the honor to submit the following report of the operations of this Bureau for the year ending June 30, 1907:

The work of the year has consisted of a continuation and enlargement of the monthly and annual reports upon the foreign and internal commerce of the United States. Additions have been made to the number of articles in which the value of imports and exports is stated in the monthly and annual reports published by the Bureau and to the list of articles and places in the statements relative to the movements of merchandise in the internal commerce of the United States, and special studies have been made to determine the relation of advancing prices to the growth of foreign commerce.

Both the foreign and internal commerce of the country showed a marked growth during the fiscal year 1907. The total value of the exports of merchandise was 1,880 million dollars, an increase of 137 millions over that of 1906, against an average increase of 83 millions per annum during the past decade. The exports exceeded those of any earlier year in the history of our foreign commerce. The imports of the year were 1,434 million dollars in value, an increase of 208 millions over 1906, against an average increase of 67 million dollars per annum during the past decade, making the total imports greater than in any earlier year. The excess of exports over imports in 1907 was 446 million dollars, which was less than in any year of the past decade with the exceptions of 1903, when the excess of exports was 394 millions, and 1905, when the excess was 401 millions.

ANALYSIS OF IMPORTS AND EXPORTS BY GREAT GROUPS.

On the export side foodstuffs showed a slight falling off compared with the immediately preceding year, while manufacturers' materials and manufactures showed a marked increase. In the group "Foodstuffs in a crude condition and food animals," the total for 1907 was 167 million dollars, against 177 millions in the immediately preceding year, a reduction of 10 millions; in the group "Foodstuffs partly or wholly manufactured," the total was 346 millions, against 347 millions in 1906, a reduction of slightly more than 1 million dollars;

in the group "Manufacturers' materials," the total was 593 millions, against 501 millions in the immediately preceding year, an increase of 92 million dollars; in the group "Manufactures for further use in manufacturing," the total was 259 millions, against 226 millions in 1906, an increase of 33 millions, and in the group "Manufactures ready for consumption," the total was 481 millions, against 460 millions in the immediately preceding year, an increase of 21 millions. Foodstuffs in a crude condition and food animals formed, in 1907, 9 per cent of the total domestic exports, against 10.3 per cent in 1906; foodstuffs partly or wholly manufactured, 18.7 per cent, against 20.2 per cent in 1906; manufacturers' raw materials, 32 per cent, against 29.1 per cent in 1906; manufactures for further use in manufacturing, 14 per cent, against 13.2 per cent in 1906; and finished manufactures, 25.9 per cent, against 26.8 per cent in 1906.

On the import side, foodstuffs in a crude condition and food animals amounted in value to 150 million dollars in 1907, against 134 millions in the immediately preceding year, an increase of 16 millions; foodstuffs partly or wholly manufactured, 159 millions, against 140 millions in the immediately preceding year, an increase of about 18 millions; crude materials for use in manufacturing, 477 millions, against 415 millions in 1906, an increase of 62 millions; manufactures for further use in manufacturing, 274 millions, against 220 millions in 1906, an increase of 54 millions; and manufactures ready for consumption, 364 millions, against 308 millions in 1906, an increase of 56 millions. Foodstuffs in a crude condition formed 10.4 per cent of the total imports in 1907, against 11 per cent in 1906; foodstuffs partly or wholly manufactured, 11.1 per cent, against 11.4 per cent in the immediately preceding year; crude materials for use in manufacturing, 33.3 per cent, against 33.8 per cent in 1906; manufactures for further use in manufacturing, 19.1 per cent, against 18 per cent in 1906; and manufactures ready for consumption, 25.4 per cent, against 25.1 per cent in the preceding year.

GROWTH IN MOVEMENT OF MANUFACTURERS' MATERIALS.

Manufacturers' materials formed not only the largest percentage in both the imports and exports, but showed a larger gain in both imports and exports than any other group. On the export side, crude materials for use in manufacturing show an increase of 92 million dollars, and manufactures for further use in manufacturing an increase of 33 millions; while finished manufactures show an increase of but 21 millions, and foodstuffs a decrease of 10 millions in those in a crude condition and of a little over 1 million in those in a partly or wholly manufactured state. On the import side, manufacturers' raw materials show an increase of 62 millions and manufactures for further use in manufacturing an increase of 54 millions; while finished manufactures show an increase of 56 millions; foodstuffs in a crude condition, 16 millions; and foodstuffs in a manufactured state, 18 million dollars. The principal articles in which the growth in exports occurs are, in the group manufacturers' raw materials, raw cotton, coal, and leaf tobacco; in the group manufactures for further use in manufacturing, pig copper, lumber, and leather. Manufactures of copper, including in this term copper pigs and other grades which have passed to a more advanced state of

manufacture, show an increase of 13 million dollars over 1906; leather and manufactures thereof, an increase of about 5 million dollars; agricultural implements, an increase of 2½ millions; cars and carriages, an increase of nearly 3 millions; scientific instruments, an increase of a little more than 2 millions; manufactures of tobacco, an increase of over 2 millions; manufactures of wood, including in this term lumber and other partly manufactured materials, an increase of 13 millions; and manufactures of iron and steel as a whole, an increase of 21 million dollars. Among the principal articles of iron and steel manufactures which show a marked growth in value of exports during the year are builders' hardware, electrical machinery, metal-working machinery, sewing machines, typewriters, locomotives, stationary engines, printing presses, and steel sheets and plates.

ANALYSIS OF IMPORTS OF 1907.

On the import side, the increase of 16 millions in foodstuffs in a crude condition occurs chiefly in coffee, which shows a growth of 5 million dollars; cocoa, an increase of 4½ millions; and fruits and nuts, an increase of about 6 million dollars. In foodstuffs partly or wholly manufactured the articles showing a marked increase are sugar, 93 million dollars, against 85½ millions in 1906, an increase of 7½ millions; and spirits, wines, and malt liquors, 22 millions, against 19 millions in 1906; while the remaining increase occurs in numerous articles of a miscellaneous character. In the group manufacturers' raw materials, the growth of 62 millions occurs chiefly in india rubber, which shows an increase of 15 millions; fibers, an increase of 3 millions; raw silk, an increase of 17½ millions; leaf tobacco, an increase of 3½ millions; raw cotton (chiefly Egyptian), an increase of 9 millions; and wool, an increase of 2½ millions; while miscellaneous articles make up the remainder. In the group manufactures for further use in manufacturing, which shows a growth of 54 millions, pig copper is an important factor, the increase being about 13½ million dollars; while pig tin shows an increase of over 7 millions; pig iron, an increase of nearly 8 millions; tin plates, an increase of slightly more than 1 million; lumber, an increase of 1½ millions; and wood pulp, an increase of about 2 millions; while chemicals, which are largely included within the groups of manufacturers' materials, show an increase of 8½ million dollars.

In the group manufactures ready for consumption the growth of 56 millions occurs chiefly in cotton manufactures, 10 million dollars, of which one-half is in laces, edgings, and embroideries; manufactures of fibers, 16 millions, of which about 9 millions occurs in burlaps, or plain woven fabrics of single jute yarn; gloves, an increase of 4 millions; and manufactures of silk, an increase of about 6 millions; while the remainder occurs in a large number of manufactured articles of a miscellaneous character.

ARTICLES SHOWING DECREASES IN IMPORTS AND EXPORTS.

The principal articles showing a decrease are, on the export side, corn, oats, and cotton cloths. Corn shows a decline of 34 million bushels; oats, a decline of 42 million bushels compared with the figures of 1906, when the exportations were abnormally high; and cot-

ton cloths, a decrease of 385 million yards, the exports to China having been in 1907 far below those of 1905 and 1906, which were in each case considerably above the average of preceding years. The exports of cotton cloth to China in 1907 amounted to but 86 million yards, against 499 millions in 1906, 475 millions in 1905, 77 millions in 1904, 277 millions in 1903, and 335 millions in 1902. This reduction in 1907 is believed to be due largely to the oversupply of American cottons accumulated in China during the years 1905 and 1906, the total exports of cotton cloths from the United States to China in the three years 1905, 1906, and 1907 having aggregated 1,059 million yards, against 689 millions in 1902, 1903, and 1904.

COMMERCIAL MOVEMENTS INDICATING MANUFACTURING ACTIVITY.

The movements of merchandise on both the import and export side indicate great activity on the part of American manufacturers. The value of manufacturers' raw materials imported in 1907 formed a larger total in value than in any preceding year, and was more than twice as great as a decade ago, being 477 million dollars in value, against 196 millions in 1897. Manufactures for further use in manufacturing were also larger than in any preceding year, being in 1907, 274 million dollars, against 220 millions in 1906, and more than three times as large as a decade ago, the total value in 1897 having been 88 millions. The total value of crude materials for use in manufacturing and manufactures for further use in manufacturing imported in 1907 aggregated 751 million dollars, against 286 millions in 1897, being thus nearly three times as great in 1907 as in 1897. On the export side the total value of finished manufactures exported was 481 million dollars, against 460 millions in 1906 and 213 millions in 1897, a decade ago; and of manufactures for further use in manufacturing 259 millions in 1907, against 226 millions in 1906 and 98 millions in 1897; the total exportation of finished manufactures and manufactures for further use in manufacturing being thus 740 million dollars in 1907, against 311 millions in 1897.

In the foodstuffs groups, both imports and exports show slight changes as compared with those relating to manufactures. Importations of foodstuffs (including in this term both those in a crude condition and those partly or wholly manufactured) amounted in 1907 to 308 million dollars, against 258 millions in 1897; while exportations of foodstuffs of the two groups totaled 513 million dollars, against 416 millions in 1897.

CHANGE IN CHARACTER OF ARTICLES IMPORTED AND EXPORTED AND ITS CAUSES.

The growing tendency to consume at home the natural products and to substitute therefor in exportations articles in a partially or wholly manufactured state is shown by a careful study of the figures of our production and exportation.

Despite the fact that the wheat crop of 1906 was, with one exception, the largest in the history of production in the United States, the total exports of wheat, in the natural state and in the form of flour, were but 147 million bushels, against 203 millions in 1903, 235 millions in 1902, and 216 millions in 1901. The share of the wheat crop

exported in 1907 was, in round terms, 20 per cent; in 1903, 30 per cent; in 1902, 31 per cent; in 1901, 41 per cent; in 1900, 34 per cent, and in 1898, 41 per cent. In corn, despite the fact that the crop of 1906 was larger than that of any earlier year, being 2,927 million bushels, the exports of the fiscal year 1907 fell 34 million bushels below those of the immediately preceding year, and were less than half of the annual average for the period 1897–1901.

The principal article of natural production in which the exports continue to advance is raw cotton, of which the total exportation in 1907 was 4,518 million pounds, against 3,634 millions in 1906 and 4,305 millions in 1905, the previous high-record year. The quantity of cotton retained for domestic consumption was in 1907 2,440 million pounds, against 2,163 millions in 1906, and formed in 1907 29.6 per cent of the total product, against 26.5 per cent retained for home consumption in 1906. The share of the domestic cotton crop retained for home consumption in 1907 was 29.6 per cent; in 1897, 18.7 per cent; and in 1887, 16.8 per cent.

The share of the corn crop exported, while always small, was even less in 1907 than in the immediately preceding years, 1906 and 1905, the share exported in 1907 being but 2.95 per cent, against 4.43 per cent in 1906 and 3.66 per cent in 1905, while in 1900 the share exported was 10.3 per cent, and in 1898, 11.14 per cent. The small exportation of corn from this, the chief corn-producing country of the world, is due largely to the fact that producers find a more ready sale and a better profit for this product when turned into the form of meats than if sold in the natural state; and this condition probably accounts for the fact that the exports of corn in the natural state since the year 1901 have averaged but about one-half those of the five-year period 1897–1901.

The exports of meat and dairy products, including food animals, have materially advanced during that period, ranging in value from 175 millions dollars in 1897 to 237 millions in 1907.

TRADE WITH THE VARIOUS SECTIONS OF THE WORLD.

Trade with the various grand divisions and principal countries of the world shows a steady growth in all of the important sections and countries except China, to which the exports show a decline, due chiefly to the termination of the demand for copper from the United States for use in minting the new coins recently authorized by that Government, and a falling off in demand for American cotton cloths, due to the over importations of 1905. To Europe the exports of the year were 1,298 million dollars in value, against 1,200 millions in the immediately preceding year, being larger than in any earlier year. To North America the total exports were valued at 350 million dollars, against 308 millions in 1906, being also larger than in any earlier year. To South America the exports were the largest on record, having been in 1907 82 million dollars, against 75 millions in 1906. To Asia the total exports were 93 million dollars in value, against 105 millions in 1906 and 128 millions in 1905, the reduction in this case being due, almost exclusively, to the falling off in the trade with China, above noted. To Oceania, the total exports were valued at 41 millions, against 35 millions in 1906, and to Africa they aggregated 16½ millions, against 19½ millions in 1906.

From Europe the imports of the year were the largest ever recorded, having been, in 1907, 747 millions dollars in value, against 633 millions in 1906. From North America the total imports were 263 millions in value, against 235 millions in 1906, and were also a larger sum than in any preceding year. From South America the total imports were valued at 160 million dollars, against 140 millions in 1906, and were also in excess of those for any earlier year. From Asia the imports were 212 million dollars in value, against 180 millions in 1906, the total for 1907 having been much in excess of that for any earlier year and more than double that of a decade ago. From Oceania the imports were valued at 30 million dollars, against 25 millions in 1906; and from Africa, 21 millions, against 12½ millions in 1906.

As above indicated, the increase in both imports and exports occurs in the trade with practically all of the principal countries, except in the case of exports to China, due to abnormal conditions in the trade of the immediately preceding year. To the United Kingdom the exports were 608 million dollars in value against 583 millions in 1906, and exceeded those of any earlier year except 1901, when the exports thereto were valued at 631 millions. Imports from the United Kingdom were 246 millions, which exceeded the figure of any earlier year, the highest figure prior to 1907 having been 210 millions in 1906. To Canada the exports were 183 millions, against 157 millions in 1906 and 65 millions a decade ago; while from Canada the imports were 73 millions, against 68 millions in 1906 and 40 millions in 1897. To Mexico the exports of the year were 66 million dollars, against 58 millions in 1906 and 22 millions in 1897; and from Mexico the imports were 57 millions, against 51 millions in 1906 and 18½ millions in 1897. To China the exports were 25.7 millions, against 43.7 millions in 1906 and 11.9 millions in 1897; and from China the imports were 33½ millions, against 28½ millions in 1906 and 20½ millions in 1897. To Japan the exports were 38¾ millions, against 38½ millions in 1906 and 13 millions in 1897; and the imports therefrom were 69 millions, against 52½ millions in 1906 and 24 millions in 1897.

TRADE WITH THE NONCONTIGUOUS TERRITORY OF THE UNITED STATES.

All of the above figures of foreign commerce are exclusive of the trade with Hawaii, Porto Rico, and Alaska, which are now customs districts of the United States; but include trade with the Philippine Islands, which has not been organized as a customs district of the United States and is therefore still included with the figures of foreign commerce in the statements rendered by collectors of customs to the Bureau of Statistics.

The trade of the United States with its noncontiguous territory shows a growth quite as strongly marked as that with foreign countries, and aggregated in the fiscal year 1907 $142,101,231, of which $74,780,023 was the value of domestic merchandise sent to the United States from the various noncontiguous territories; $70,494, shipments of foreign merchandise from those territories; $65,978,297, domestic merchandise sent to those territories from the United States; and $1,272,417 foreign merchandise sent to those territories from the United States. In addition to this, there was sent from Alaska in

1907 gold of domestic production valued at 25 million dollars, against 20 millions in 1906, a little less than 20 millions in 1905, and slightly less than 15 millions in 1904.

The principal articles forming the trade between the United States and its various noncontiguous territories are, in the case of shipments from the Hawaiian Islands, sugar; from Porto Rico, sugar, tobacco, cigars, fruits, and coffee; from the Philippine Islands, manila hemp and sugar; and from Alaska, fish, furs, copper, and gold; while the shipments to each of these territories include a long list of articles, chiefly manufactures of cotton, iron and steel, and temperate zone foodstuffs.

GROWING DEMAND FOR TROPICAL AND SUBTROPICAL PRODUCTS.

The growing demand for tropical and subtropical products, which has been a marked characteristic of the trade of the United States during the past several years, is again illustrated in the figures of imports of articles of this general class. The total value of tropical and subtropical products brought into the United States from its noncontiguous territories and from foreign countries in 1907 was, in round terms, 567 million dollars, against 486 millions in 1906, 385 millions in 1900, 298 millions in 1890, 242 millions in 1880, and 206 millions in 1875. The most important among these articles of tropical and subtropical production are sugar, 127 million dollars, against 86 millions in 1900; coffee, 78 millions, against 52 millions in 1900; raw silk, 71 millions, against 45 millions in 1900; india rubber, 59 millions, against 32 millions in 1900; fibers,, 42 millions, against 24 millions in 1900; fruits and nuts, 37 millions, against 19 millions in 1900; tobacco and manufactures thereof, 35½ millions, against 15½ millions in 1900; and cotton, 21 millions, against 8 millions in 1900.

ADVANCE IN PRICES REFLECTED IN THE VALUES OF IMPORTS AND EXPORTS.

The advance in prices of many of the important articles entering international commerce forms an important factor in the growth of both imports and exports. The United States is the world's chief producer of cotton, corn, copper, and meats for exportation; and in all these articles marked advances have occurred in prices. The United States is also a large importer of manufacturers' materials, especially hides and skins, raw silk, fibers, wool, india rubber, pig tin, and copper, and in all these there has been also a material advance in prices.

Comparing prices of articles exported or imported in 1907 with those of the fiscal year 1899, the first full year after the enactment of the existing tariff law and a period therefore unaffected by tariff changes, a large number of articles imported and exported show in 1907 marked increases in prices over those of 1899, the increase ranging in many cases above 50 per cent and in some cases more than 100 per cent.

Respectfully,

O. P. AUSTIN,
Chief of Bureau.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

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REPORT

OF THE

CHIEF OF THE BUREAU OF MANUFACTURES

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DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF MANUFACTURES,
Washington, September 2, 1907.

SIR: I have the honor to submit the following report of the work of the Bureau of Manufactures for the fiscal year ended June 30, 1907:

The extent of the manufacturing industries of the country is forcefully presented by figures of the Census Bureau, which place the value of their annual output at $14,802,147,087. This vast sum does not represent the value of products finished for consumption, a large proportion being expended in the several stages between the raw material and the completed article; but it does represent the value of products in the fabrication of which capital is invested and in the manipulation of which money was expended in wages for labor. Rapid as has been the growth of manufactures in the past few years, it is certain to be marked by greater advancement in the future, proportionately with the growth of the country and the incidental enlargement of our mechanical capacity to manufacture. Until quite recently our mills and factories were barely able to supply the requirements of the home market. Incentive that is incidental to active competition, increased capital, and the remuneration that follows intelligent direction, has resulted in extending every field of industrial activity, enabling manufacturers not only to meet home demands but compelling them to seek foreign markets to insure continuous employment of their enlarged energies. The frequent demands that come to the Bureau of Manufactures for information concerning foreign markets are unmistakable indications of the progress being made in this direction.

VALUE OF DOMESTIC EXPORTS.

For the year ended June 30, 1907, the aggregate value of domestic merchandise exported is placed at $1,853,718,034, an increase of $135,764,652 over the year preceding. In the classification of this aggregate the Bureau of Statistics credits "Manufactures ready for consumption" with $479,700,679, an increase over 1906 of $19,888,023. These figures, however, do not measure the entire value of manufactures exported provided "foodstuffs partly or wholly manufactured" and "manufactures for further use in manufacturing" be included.

"Foodstuffs partly or wholly manufactured" are credited in the table showing values of domestic merchandise exported with $345,676,856, and "manufactures for further use in manufacturing" with $260,613,878. Adding these two classifications to "manufactures ready for consumption" gives an aggregate of $1,085,991,403, constituting 58.58 per cent of the entire exports for the twelve months ended June 30, 1907. "Foodstuffs partly or wholly manufactured" include wheat and other flours and meals, and a number of additional articles that may properly be termed completed manufactures; and this is true in greater degree of "manufactures for further use in manufacturing." Broadly considered, therefore, the three groups or classifications referred to may be credited to exports of manufactures in an analysis of the foreign commerce.

Added significance is given the increase of nearly $20,000,000 in exports of manufactures ready for consumption in consideration of the fact that the exports of cotton cloths declined upward of $21,000,000, falling from $43,181,860 in 1906 to $21,239,247 in 1907. This loss is attributable wholly to a decline in exports to China, which fell from $29,641,188 to $5,714,191. One of the contributory causes for this great decline is the popular feeling aroused in China among certain classes of the people against the United States by native agitators encouraged by foreign commercial rivals, based upon alleged outrages against Chinese residents in the United States. While this may be assumed to be the principal cause for the decline, there is another which is perhaps of equal importance, namely, the indifference of manufacturers to the necessity and the obligation of maintaining established business relations, and of keeping customers in foreign markets fully supplied. The general prosperity now prevailing throughout the United States is taxing our factories and mills to the utmost to fill orders for home and adjacent markets; therefore manufactures of cotton cloths which found ready sale in China have relaxed or suspended efforts to maintain themselves in the Chinese market. A third cause may be added: Large stocks of American cottons carried over from the two preceding years, the Chinese imports in the fiscal year 1905 having aggregated $27,761,095, and in 1906, $29,641,188, an average for the two years of $28,701,141.

COTTON PIECE GOODS.

The large increase in the producing power of our factories and mills, impelled by the constantly increasing demands for their output, will surely result in an accumulation of stocks far beyond the needs of home markets, and precipitate a period of stagnation that will check production and bring about temporary distress, unless outlets be established for the disposal of the excess in foreign markets. To guard against such a contingency American manufacturers should make persistent effort to find markets abroad at this time of abundance, and when entrance is effected they should be cultivated with the utmost diligence and held with the greatest tenacity. Adherence to this policy is perhaps more incumbent upon and of greater immediate concern to manufacturers of cotton fabrics than to those of any other of the leading manufacturing industries, and especially with a view to securing markets in the Orient and in those of near-by American countries. The possibilities of the future for American cotton

fabrics in these markets is made plainly apparent by a glance at figures showing the value of such goods supplied by British mills. To India, the Straits Settlements, and Ceylon cotton manufactures were sent by Great Britain in the calendar year 1906 to the value of $131,590,128; to China, $47,114,173; to South America, $48,661,291; to Central America, $2,769,046; to Mexico, $3,401,555; to Cuba, $3,506,770; to other West India islands, $1,197,717. The insignificance of the exports of cotton fabrics from the United States, whence is drawn 70 per cent of the raw material consumed in the world's requirements, is apparent by comparison with the foregoing figures. As heretofore stated, the aggregate value of cotton cloths exported from the United States during the twelve months ended June 30, 1907, is $21,239,247, less than one-half of England's sales in South America alone in the calendar year 1906. To all South America exports of these fabrics from the United States for the year ended June 30 aggregated $3,432,194; Central America, $1,773,414; Mexico, $267,695; Cuba, $990,754; other West India islands, $1,978,637, making a total of $8,442,694, against $48,600,000 sold by Great Britain to the same countries in the calendar year 1906.

INVESTIGATIONS BY SPECIAL AGENTS.

The work of investigating trade conditions in foreign countries with the object of enlarging the exportation of products of the United States was continued and upon a larger scale than during the preceding year. This extension was in compliance with a clause in the act making appropriation for the service directing that investigations should be made of market conditions abroad with special reference to the sale of the products of cotton. Under this authority two special agents were appointed upon the recommendation of leading manufacturers of cotton fabrics and one upon the recommendation of the representatives of the cotton-seed industry, these three special agents being experts in their respective lines. Of the first two, one was assigned to investigate methods of manufacturing cotton cloths and yarn in the Lancashire district of England, which inquiry included styles and quality, preparation for market, and all details attaching from the reception of raw material to the delivery of the manufactured products to foreign consumers. The other was assigned to the Orient and British India, the Levant, and other countries bordering on the Mediterranean Sea which consume cotton fabrics. The third of these experts in cotton products was assigned to continental Europe.

The Lancashire district was selected for investigation because that is the seat of England's cotton industry. In the calendar year 1906, according to British official reports, there were exported by the United Kingdom to foreign countries, including the colonial possessions, cotton fabrics and yarns to the value of $484,000,000. Of this amount $10,984,618 [a] is credited to the United States; $48,600,000 to Latin-American countries; $119,505,000 to British India; $9,968,000 to the

[a] These figures represent the value of cloth only. The value of cotton manufactures other than cloth imported into the United States from the United Kingdom in the calendar year 1906, according to figures of the Bureau of Statistics, was $11,112,553, and the same authority places the total value of manufactures of cotton from Great Britain at $20,679,350.

Straits Settlements and Ceylon; $11,640,000 to the Dutch East Indies; $46,230,000 to China, including Hongkong; $9,738,000 to Japan, and $2,368,000 to the Philippine Islands.

The results of the investigations by the Department's expert in the Lancashire district were published from time to time and widely distributed. These reports not only elicited commendation from American manufacturers of cotton fabrics, but attracted generally the attention of business men associated with them in the sale of their products and of representative men at home and abroad engaged in that branch of international trade. A report has been prepared by the special agent which reviews his labors in Lancashire and in which the extent and value of Great Britain's cotton industry is set forth.

The Orient and British India were selected as a field for expert inquiry because the many millions of people of those countries consume enormous quantities of cotton cloths and constitute the principal markets for the Lancashire manufacturers. In those markets there are no preferential inducements for the products of a particular nation, on the one hand, nor hindrances of any character to commercial enterprise from whatever quarter on the other. The door is wide open to all, and the goods which best meet popular requirements and are packed and presented for sale in accordance with local and long-established methods of conducting business are certain to secure ready admission and remunerative sale. Results of investigations made by the expert in British India and the Philippine Islands were published in the current publications of the Bureau and subsequently assembled and issued in pamphlet form. In like manner the reports of the cotton-fabrics experts in England, Japan, and Manchuria were issued in pamphlet form, to which were added reports from special agents on market conditions relating to cotton fabrics in Australia, Austria-Hungary, Italy, and South America.

COTTON-SEED PRODUCTS.

The products of cotton seed have increased with remarkable rapidity and have reached a volume that gives the cotton-seed industry a prominent place in the list of American industrial activities. Forty years ago cotton seed, except that required for growing the next year's crop, was of little value, and constituted an incumbrance involving expenditure of labor and money to remove. There is now invested in the conversion of this former almost useless material into products that are steadily advancing in commercial importance and popular esteem, approximately $100,000,000, and of which the exports for the fiscal year ended June 30, 1907, aggregated $40,513,400, an increase of $9,344,400 over 1906. Aside from its intrinsic value this relatively new industry has an economic value and importance to the country, the beneficial results of which are especially felt in the several States in which cotton is indigenous, and in which the cotton-seed industry is naturally located. It is pertinent to observe, in connection with this industry, that while about three-fifths of the cotton fiber is transported beyond the seas, furnishing employment to foreign labor, with resultant large profits to foreign capital, the greater proportion of the products of the seed is the output of American mills and sold abroad.

Appreciating the present importance and future possibilities of this industry in international trade, the Department appointed a special agent to investigate conditions in foreign countries with regard to the sale and consumption of cotton-seed products. This work was begun in the last months of the fiscal year, was conducted with ability and thoroughness, and with entire satisfaction to those directly concerned, by the expert to whom it was committed. The preliminary reports were published as received and distributed among those actively engaged in the production and those associated with them in the sale and distribution of these products. It is to be regretted, however, that the expert assigned to this field was compelled, by reason of physical disability, to abandon the work about July 1 and return to the United States. The work will be continued during the fiscal year 1908 by another expert, appointed on the recommendation of the chosen representatives of the cotton-seed industry.

Prior to the appointment of an expert to investigate cotton-seed products, upon request from the Department of Commerce and Labor the Department of State issued instructions to consular officers to inquire into the manufacture, sale, and consumption of those products in their respective districts, together with competing products, the interrogatories constituting the basis for the inquiry having been formulated by the executive officers of the Inter-State Cotton-Seed Crushers' Association upon suggestions from the Bureau of Manufactures. The reports received in compliance with the Department's request were assembled and classified, and published as Volume XXXIX of Special Consular Reports, which was supplied to individuals and firms engaged in the cotton-seed industry. Reports from special agents and consular officers received subsequent to the issuance of the volume were published in Daily Consular and Trade Reports.

LEATHER AND FOOTWEAR.

In addition to the three experts in cotton products, investigation was made of European methods in relation to the sale of leather and its manufactures, including boots and shoes, by an expert in those allied industries. Great Britain and the principal countries of continental Europe were visited, and information obtained which American manufacturers and exporters declare has been valuable to them, and which, it is believed, will prove helpful in enlarging the sale abroad of leather and its manufactures, the aggregate value of the exports of which during the fiscal year under review was $45,476,969. While specially instructed to inquire into the leather trade, the expert agent was also directed to inquire into general trade conditions. The results of these inquiries were furnished in preliminary reports, which were published. Similar reports on leather and its manufactures were also published, and a final report is ready for presentation to Congress.

Three special agents, in addition to the experts named, were assigned, respectively, to Australasia, South Africa and Egypt, and Asia Minor and India. These agents investigated general trade conditions in the countries visited. Their reports were frequent and comprehensive, covered industrial and commercial conditions, and were

prepared with special reference to the adaptability of American products to the markets visited and the advisability of undertaking shipments. The preliminary reports were published, and their value is evidenced by the fact that they were largely reproduced by the daily press and by periodicals devoted to special industrial and commercial interests.

In connection with the investigation of trade conditions in Asia Minor an inquiry was made into transportation methods and existing steamship facilities between Atlantic ports of the United States and those of Mediterranean countries and of the Orient, which was supplemented by further inquiry at New York. The result of this inquiry forms the concluding pages of the special agent's report on Asiatic Turkey.

VALUE OF EXPERT INQUIRY.

The success that attended the labors of the expert agents and the satisfaction with the work manifested by those whose interests were to be served, suggest that investigation along special lines by experts should be continued and extended. In the last annual report of the Bureau it was declared that "investigation by men trained in particular fields of activity, whose mental equipment has been supplemented by practical application, possessing in addition to these basic qualifications zeal to prosecute and ability to describe results of their investigations, can not fail to be highly valuable to the country and advantageous to the special interests that are served." The experience of the year under review confirms and accentuates that declaration. It would not be practical nor prudent to undertake expert investigation in behalf of the many industries that are constantly expanding under the impetus that springs from rapid growth in population and the development of productive energy that is incidental to such growth, but there are certain products of American ingenuity and skill that are known and acknowledged in foreign markets as superior in design, workmanship, and adaptability to similar products of competing countries. The sale of many of these products, and especially of certain classes of machinery, would be extended and enlarged through persistent and intelligent presentation by men familiar with their merits and construction and skilled in their operation. Appeals have come to the Department from representatives of several of these progressive industries for such assistance as can be extended by the Government through the Bureau of Manufactures in making investigations by expert special agents, with requests should be given earnest consideration with a view to affirmative action.

SERVICE IN THE HOME FIELD.

Important service was performed by several of the special agents immediately following their return to the United States. The expert who investigated the Lancashire district obtained samples of every grade of cotton piece goods exported from that district, including a number of fabrics not manufactured in the United States, but the manufacture of which, it is believed, can readily and profitably be undertaken, and upon his return to the country an itinerary was

arranged for him, which embraced the principal cotton-manufacturing centers of the Southern States. He thus met and conferred with the managers of mills in those States, exhibited samples, and supplied information with fullness of detail that could not be given in a written report. The samples from England and those furnished from Egypt, India, and China were sent upon application to manufacturers and their export agents in almost every section of the country. The expert in leather also met leading representatives of the associated leather industries in New England, and advised with them concerning their interests in foreign markets. At annual gatherings of national associations of manufacturers, held at New York and Philadelphia, addresses were made by special agents of the Department, their observations and experiences abroad forming subjects of discussion.

This feature of the work of the Bureau has received approval from business men, and its continuance and extension is strongly urged. It is a simple and practical business procedure, but is neither new nor novel. In the elaborate, comprehensive, and highly perfected systems for the enlargement of their foreign trade established by our principal commercial rivals personal conferences between manufacturers and government agents occupy a prominent place. Consular officers and other officials whose duties bring them in direct contact with conditions in the world's markets, upon returning home are required to meet and advise with their countrymen who are engaged in business, appointments for such meetings being arranged in advance by the department of the government charged with fostering and promoting the country's industrial and commercial interests. Such conferences are not only profitable to business men, but are helpful to the public officer in bringing him into closer touch with commercial men, and in supplying him with information of a practical character that will enhance his usefulness and increase his efficiency as a commercial agent of the government.

It is respectfully recommended that steps be taken through Executive action, or legislation if necessary, to provide for holding conferences of the character alluded to between consular officers and special agents and the representatives of the great business interests of the country, which conferences, after the manner of the European systems, should be arranged by cooperation between the Department of State and the Department of Commerce and Labor.

DELAY IN TRANSIT.

One of the obstacles to the enlargement of the export trade of the United States is the uncertainty of transit between the place of production and the seaboard. The absence of a well-defined system for the prompt delivery to steamships of merchandise destined for foreign countries is doubtless due to the irregularity and relatively small volume of such trade in certain lines. Merchants in the Orient especially complain that approximately accurate calculation can not be made as to when goods ordered in the United States will be delivered at Hongkong, Shanghai, or other point of destination in the Far East, and in consequence orders go to European houses that should come to those of the United States. With a view to

bettering this condition the attention of representatives of leading trunk railway lines was invited to it, and it is understood plans are now being considered by traffic managers of railway and ocean steamship companies to bring about the desired results. The question is mainly to secure reliable and more rapid transit by rail for merchandise destined to oversea ports, and does not necessarily involve rates. The exact time for the departure of steamships from Atlantic and Pacific ports is fixed months in advance, and it should be possible for intending shippers to arrange with railway companies for delivery on a certain vessel sailing on a fixed day. There is less difficulty at Atlantic than at Pacific ports in securing prompt service, owing to the volume of business that offers at the former, but even at Atlantic ports freight from western points is frequently delayed in delivery to steamships because of slow and irregular transit, detention at terminal points, and sometimes of indifference of steamship managers, which causes would be removed by cooperation in plans perfected by the parties concerned. What is needed is a system by which carloads of merchandise consigned to foreign countries when started shall be kept moving continuously toward destination, which should not be difficult of accomplishment with several through competing trunk railway lines between the Atlantic and Pacific oceans. With such a system freight originating at points east of the Missouri River consigned to the Orient or Australia could be delivered on board ship at one of the Pacific ports for a specified steamship, thus enabling the shipper to inform the consignee that his goods would reach him on a designated day. Sufficient freight for the Far East now originates in the section east of the Mississippi and Missouri rivers to warrant an effort being made in the direction indicated, and by cooperation of shippers and carriers this freight could be consolidated at one or more points, started forward, and kept moving continuously until it reaches a Pacific port and is delivered to the vessel ready to receive it. In perfecting and successfully maintaining a system intended to insure speedy transit and delivery for the exports of the country commercial organizations can render powerful assistance.

COOPERATION WITH COMMERCIAL BODIES.

In further extension of the activities of the Bureau it is in contemplation to seek the assistance and cooperation, in accordance with the policy in vogue in the principal countries of Europe, so far as that policy can be adapted to our system of government, of the chambers of commerce, boards of trade, and similar bodies located in the large commercial cities and principal centers of manufacturing industries. In countries of western Europe the chambers of commerce are more or less official bodies, and through representatives chosen by their membership are consulted by officials of the respective governments in relation to commercial and industrial affairs, and are given a defined status in the formulation and administration of regulations governing such affairs, both national and international. The high estimation in which these commercial bodies are held and the reliance placed upon their wisdom, integrity, and patriotism is evidenced by the fact that in a recent commercial convention with the United States they are specifically named in connection with the administration of

certain important features of the agreement reached by the convention. While a relationship such as that briefly outlined could not be established in this country, it is reasonably certain that, in pursuance of carefully considered plans, the benefits derived from it would be secured to the business interests of the country by voluntary cooperation on the part of commercial organizations with the Department of Commerce and Labor in its efforts "to foster, promote, and develop the various manufacturing industries of the United States and markets for the same, at home and abroad," through the Bureau of Manufactures, as directed by the act of Congress creating the Department. Many of the principal commercial organizations of the country are ready to consider propositions for bringing about cooperation, and some of them have given formal expression favorable to its early consummation. The hope is indulged that at the next annual gatherings of these bodies this matter will be fully discussed and plans evolved for effective cooperation.

PREPARATION OF FOREIGN TARIFFS.

The collation and arrangement of tariffs of foreign countries in form for distribution was carried on during the year, as directed by the act of Congress, to the extent that was possible with the small sum appropriated for that work, namely, $3,500. This sum was barely sufficient to provide compensation for one tariff expert and one assistant, and in consequence it was not possible to fully meet demands from business men, members of Congress, and administrative and executive officers of the Government for information on tariff matters. Details from the general clerical force of the Bureau to assist in the more imperative demands upon the tariff division for such information were found necessary. While such details afforded temporary relief on the one hand, they occasioned delays and embarrassments on the other, the clerical force of the Bureau being inadequate to keep abreast with the constantly growing demands upon it. The Bureau was further embarrassed in its general work by the temporary withdrawal of the tariff expert for important service with the Department of State, a service which extended over the first eight months of the fiscal year. This service was in connection with the Pan-American Conference held at Rio de Janeiro in August, 1906, as an expert attaché, and subsequently as a member of the Tariff Commission sent to Berlin to confer with the authorities of Germany with the object of adjusting differences between that country and the United States as to tariff rates and regulations.

Notwithstanding the inadequacy of needed facilities, the Bureau assembled and segregated the tariff rates of all countries on leather and its manufactures, on farm products, and on machinery of every description, each classification being issued in a separate pamphlet. It is contemplated to collate rates in like manner on other articles and commodities that are included in tariff schedules. There were also issued pamphlets containing the recently enacted tariff of Servia and the commercial agreement between the United States and Germany. Through the courtesy of th[illegible]s department of the Dominion government, several hundred [illegible] enacted Canadian tariff law were obtained a[illegible]ants. The tariff laws of France have bee[illegible], together with

judicial decisions, ministerial decrees, customs regulations, and other matters relating to the revenue laws of France. The tariff laws of Germany are being compiled and arranged in like manner. These two compilations will be published with explanatory notes, and so arranged as to show how merchandise exported from the United States to France and Germany is affected by the general and conventional rates of those countries.

Consideration of the scope and character of the tariff work of the Bureau, as defined by the act of Congress, will make apparent the inadequacy of the sum appropriated to meet the requirements of the law. Hitherto the amount appropriated has been $3,500 per annum, which was increased for the current year to $5,500. The increase of $2,000 will furnish relief to the extent that it secures ordinary clerical assistance, but it will not enable the Bureau to carry on the work of collating and preparing for publication the tariff laws of foreign countries, "accompanied by a statement showing the equivalent in currency, weights, and measures of the United States of all foreign terms of currency, weights, and measures used in such tariffs," as that work should be and as it is expected by the business men of the country to be carried on. The duty placed upon the Bureau in this particular matter is not limited to the mere collation and arrangement of tariff schedules and the ascertainment of rates of duty. That is the least important feature of the work involved. Customs decisions based upon ever changing conditions, ministerial decrees, judicial decisions, port regulations, and proposed changes in revenue laws, together with questions relating to trade-marks, forms of invoices, warehousing, terminal facilities, and others that are intimately associated with the clearing of merchandise at ports of entry and its delivery to consignees, are matters naturally allied with customs tariffs and foreign trade, although not defined in legislative acts. These are matters of the highest importance to individuals and firms engaged in international trade, and especially to those contemplating such trade, who reasonably and naturally look to the Department of Commerce and Labor for early and accurate information in regard to all these details.

Proper equipment to respond to frequent demands for this class of information, which demands increase with the growth in the country's foreign trade, requires that the Bureau shall be supplied with men who have knowledge of tariff and revenue laws and all matters connected with their administration; and, furthermore, that it shall have the services of men familiar with the languages of the principal commercial nations of Europe, in order that accurate translations may be made and promptly supplied to our business men. In addition, an adequate clerical force is necessary to record, classify, and file the current work and look after official, technical, and trade publications, that the information collected and collated may be promptly available for the business interests of the country as well as helpful to the executive and legislative departments of the Government.

In the keen competition for international trade that prevails, and which at times assumes aggressiveness that menaces continuance of friendly relations, it is imperative, if advantages are to be secured, to have the earliest possible information about all matters that affect or are likely to affect that trade, not the least of which is timely

notice and explanation of proposed changes in tariff rates and customs regulations. Under existing conditions the Department of Commerce and Labor is dependent for such facilities upon the thoroughly equipped commercial departments of European governments, with the consequent result that our business men have not opportunity to make a timely start in international competition. Experience of European countries has demonstrated the desirability of having a number of tariff experts engaged in this work. The governmental systems of those countries for fostering industries at home and promoting trade abroad are thorough in organization, complete in equipment, and administered with forcefulness and vigilance. Various foreign countries are assigned to certain divisions directed by experts, so that the resources, industrial productivity, commerce, and customs and revenue laws of a country committed to a division become familiar to the principal officials of that division, and upon whom the commercial community rely not only for information and advice, but for the settlement and redress of grievances arising from alleged errors in classification or excessive exactions in collection of duties by foreign customs officers. By means of these systems immediate and satisfactory response may be made to all reasonable inquiries from business men, and the largest measure of information is ever ready to meet the requirements of the executive department in negotiations with foreign governments. In this particular branch of safeguarding and promoting foreign trade each of the principal commercial nations of Europe, with whom the United States is striving to compete in the world's markets, expends annually a much larger sum than is appropriated for the entire work of the Bureau of Manufactures.

It is respectfully suggested that Congress be urged to provide the means to enable the Bureau to perform with efficiency the prescribed duty of collating and arranging tariffs of foreign countries. The sum available for the current year is inadequate.

THE PARCELS POST.

Earnest appeals are being made by merchants for further extension of the parcels-post to foreign countries. It is claimed that extension would open markets which are now closed to American business men for lack of transportation facilities, but which are open to their competitors who have advantages of the parcels-post system. Shipments by mail of themselves do not appear to have important intrinsic value when contrasted with the tremendous aggregates that measure international trade, but as a means for introducing merchandise through trial orders, and thus affording opportunities for establishing a market for heavy shipments, they have proved of the highest value to the merchants of countries in which the parcels-post has almost universal application. To certain parts of the world in which American goods are unknown, and to others in which they have very limited sale, there is now no way by which small packages may be sent, and the high cost for postage practically excludes them from the regular mails. Extension of the parcels-post would remove the obstacles that now constitute an effective blockade of this channel. The conveyance of small packages by parcels-post avoids the delays and

annoyances resulting from customs-house exactions when the ordinary postal methods of transmission are employed, which constitute one of its principal advantages. In the former case the invoice accompanies the parcel and the addressee secures direct and expeditious delivery, while in the latter he is summoned before a revenue officer and required to undergo tedious and vexatious examination.

The United States has parcels-post agreements with Belgium, Denmark, Germany, Great Britain, Norway, Sweden, Australia, Hongkong, and Japan, under which packages limited to 4 pounds and 6 ounces are carried in the mails. Agreements with Newfoundland, nearly all the West India Islands, Mexico, British Guiana, British Honduras, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Peru, Venezuela, and New Zealand fix the limit of weight of parcels at 11 pounds. The rate for Bolivia, Chile, Ecuador, and Peru is 20 cents per pound; for the other countries named the rate is 12 cents. It will be observed that no agreements exist with the Dominion of Canada, Cuba, Argentina, or Brazil, each of those countries offering greater opportunities for sales through parcels-post than most of those with whom such agreements have been made. Turkey in Asia, Egypt, India, the Straits Settlements, and other countries in the Far East also offer encouraging fields for American manufactures, and which could be opened up to them by means of the parcels-post.

SUPPLYING FOREIGN OPPORTUNITIES.

The work of collecting and tabulating information concerning individuals and firms at home and abroad actively engaged in foreign trade has been continued and broadened, the aim being to bring together those who have products to sell and those who are seeking to purchase. The possession of names of individuals and firms engaged in the manufacture of American commodities, and those associated with them in their sale and exportation, enables the Bureau to keep in close touch with the leading manufacturing industries of the country, and to apprise them of opportunities that may offer to dispose of their products in foreign markets. Information of special opportunities for foreign sales reaching the Bureau through reports from consular officers and special agents is communicated directly to manufacturers and their agents having facilities for supplying specialties desired; and in cases where foreign merchants seek American products through competition, the facts are published briefly in Daily Consular and Trade Reports, withholding names of intending purchasers and their location, these being furnished only upon application to the Bureau. Formerly this class of information was published without restriction, thus enabling agents in the United States of foreign manufacturing concerns to advise their principals of the opportunities presented. The present system checks and in large measure prevents valuable business information, collected by governmental agents for the exclusive benefit of American manufacturers and merchants, from being communicated by mail or cable to European rivals before it can be effectively utilized by American manufacturers and merchants. This system was begun early in 1906, and has developed into a work of considerable magnitude. That it is appreciated by

American business houses is attested by the constantly increasing number of applicants for the reserved information, and its value and utility are recognized by reproduction in the numerous periodicals published in the interest of specific industries. The method adopted consists in publishing each "opportunity" under an index or file number, omitting details, which are furnished only upon written application. Greater advantages would be derived by business men if consular officers were given authority to use the cable in conveying these "opportunities," sending direct to the Bureau of Manufactures when the use of the cable is warranted by conditions in which time is an important element. Instances might be cited of information of tenders having been forwarded by mail, through the usual channels, for construction work, which did not reach the Bureau of Manufactures until after the day fixed for submitting bids. Direct communication by cable would have furnished American manufacturers with opportunity to make tenders for undertaking the work offered. The growth of this practical work of extending the export trade and the increasing volume of correspondence it entails requires further addition to the clerical force.

In connection with the system of supplying "foreign opportunities," the large number of names of firms and individuals in foreign countries engaged in international trade now in possession of the Bureau are of great value. These have been supplied by consular officers and are classified according to the particular business in which parties named are engaged, thus enabling the Bureau to furnish American manufacturers with names and locations of mercantile concerns of the principal foreign countries, and to answer the frequent inquiries from foreign merchants for information regarding sources of supply in the United States. The lists of foreign business houses now on file in the Bureau from every country of the world would be of far greater value if put in form for more ready reference and greater facility for speedy utilization, a work which could be performed by employing several temporary clerks for a short period. Such an arrangement of these lists would economize time and labor in their consultation, and would furnish corresponding advantages to those for whose benefit they are maintained.

INTERNATIONAL EXPOSITIONS.

Attention is again invited to opportunities offered American manufacturers and merchants by the expositions of national and international character held in foreign countries. Invitations to place their products at these expositions are regularly extended to American manufacturers, but have not as a rule been accepted. The importance of these expositions to American producers has been explained in detail by our consular officers in published reports, and special efforts have been made by their managers, in many cases, to secure representation from the United States. The exhibition of machinery for doing certain work, including farm machinery, with facilities for practical demonstration; of household and office furniture, hardware, boots and shoes, products of American cereals, commonly known as "breakfast foods," of cotton seed and its products, and other products of the United States of admitted excellence and superiority,

would undoubtedly insure remunerative results. Participation in the larger and more important of these expositions by the several States, through exhibits that would illustrate national resources and the extent and variety of products, is suggested, and the recommendation is renewed that Congress be urged to make provision for the encouragement of movements in this direction and for representation by the Government. Provision should be made whereby the Secretary of Commerce and Labor would be enabled to take the initiative in movements that would insure creditable representation of the products of American factories and mills at the more important national and international expositions held in foreign countries.

PUBLICATION OF CONSULAR REPORTS.

During the year there were received 7,015 reports from consular officers, an increase of 1,524 over the number received the preceding year. While all these reports required examination by the consular division of the Bureau, a considerable number were not published. The unpublished reports included those made in compliance with individual and official requests for information. In addition to reports received from consular officers 1,678 articles were prepared for publication by the Bureau, consisting of matter relating to commercial and industrial affairs and drawn from official and other trustworthy sources. In this feature of the work there was a decrease of 194 articles compared with the year preceding. A considerable number of the unused consular reports contained valuable information in relation to trade conditions in the respective consular districts, which is held in the permanent files of the Bureau for use by manufacturers and merchants.

The interest felt by business men in the work of the Bureau, and the value placed upon its publications, are apparent from the constantly increasing correspondence and from the numerous requests received for both the daily and monthly editions of Consular and Trade Reports. The average circulation of the Daily for the year was 6,700, and of the Monthly, 8,000. The largest circulation attained by the Daily was 7,900, and of the Monthly, 8,100. These figures, and especially those for the Daily, would have been much larger if careful scrutiny of all applications had not been made, and those only complied with coming from applicants to whom the publications would have substantial value. Occasional revisions of the mailing lists are made with the view to confining the distribution to the classes for whose especial benefit the work of the Bureau is directed. There seems to be a widespread belief that as Consular and Trade Reports are published at public expense and distributed gratuitously, all who apply have a right to be furnished with them. It is true the statute does not prescribe that certain classes only shall be served, but the character, the intent, and purpose of the publications, and the fact that a limit is placed upon the number of copies that may be printed must be kept in mind by those charged with the work of preparation and issue, and who are amenable to laws which govern the expenditure of public money. The classes recognized as being entitled to receive Daily and Monthly Reports are those actively engaged in business, the daily and periodical press, commercial and trade organ-

izations, libraries, and educational institutions, especially those devoted to scientific, technical, commercial, and industrial training.

The relatively small circulation of both the daily and monthly issues of Consular and Trade Reports, in view of the number of individuals and firms engaged in the manufacture and marketing of products, is due partly to the fact that many included in the classes referred to are unaware of their publication, and partly to the very liberal use made of their contents by the press. This reproduction by the press throughout the country of matter published in Daily Consular and Trade Reports places it before millions of readers, and carries it to the factory, the warehouse, and the countingroom, thus assisting the work of the Bureau to a degree that could be performed by no other agency. This liberal use of the Bureau's publications by the press of the United States, as well as by that of other countries, is not only of the greatest value to the business interests of the country, but is a manifestation of appreciation of the work being done by the Bureau for the promotion of the great material interests of the country and the enlargement of its foreign trade from men of broad vision, intelligent discernment, and knowledge of public affairs which commend their judgment to the people and give it force and value.

REPORTS ON SCIENTIFIC AND TECHNICAL SUBJECTS.

There come to the Bureau from business men, with more or less frequency, requests for information on special subjects, the collection and collation of which require expenditure of much time and labor by consular officers. In some cases the subjects to be investigated are scientific and technical, having relation to current affairs or events of common concern, involving the possession of knowledge in certain lines and a degree of special preparation to properly perform this class of work, which can not reasonably be expected from consular officers. In compliance with instructions to prepare reports on such subjects, consular officers have compiled information from encyclopædias and other authoritative publications, and, in some instances, at their own personal expense, have obtained reports from recognized experts. It is respectfully suggested that this policy is inherently erroneous, unfair to consular officers, and not calculated to secure satisfactory results. If a subject of the character referred to be of sufficient interest and importance for investigation by the Department, it should be committed to those known to be qualified to perform the work with the intelligence and thoroughness that would give the force of professional authority and technical value to their reports. It is respectfully recommended that Congress be asked for a specific appropriation of $1,000, or so much thereof as may be necessary, to be expended under the direction of the Secretary of Commerce and Labor, to procure information on scientific and technical subjects abroad which would be useful to and promotive of the business interests of the country.

Instructions are also sent to consular officers from time to time upon requests from this Department, and originating with business men, to investigate and report on commercial and industrial questions requiring considerable labor and research and not infrequently personal expense on the part of those officers. As a rule, these subjects

are within their line of duty, but the fact is generally overlooked that consular officers have regular and exacting office duties that can not be suspended or neglected and which, at the principal consulates especially, occupy their entire time during the business hours of the day, and which are performed, in many cases, without adequate clerical assistance. The extra duty in making special investigations into matters of this kind has, therefore, to be performed as time and opportunity offered, thus delaying the preparation of these particular reports and arousing prejudice against consuls and unjust criticism of the consular service from those who originated the special inquiry and who may entertain the belief that those officers have no duties that should interfere with the prosecution of special investigations. Consular officers should be relieved from the more important and comprehensive investigations involved in this class of work, as has been done by the principal countries of Europe, by whom are assigned to commercial attachés all important investigations involving the expenditure of unusual time and labor to prosecute. These latter officers, selected on account of special fitness, are found at nearly all of the embassies and legations of European countries and at some of their principal consulates. It is suggested that this class of work, popular demand for which is progressive, would be more thoroughly, expeditiously, and satisfactorily performed if provision were specifically made for it.

COMMERCIAL RELATIONS.

In addition to reports intended for immediate publication, consular officers are required to prepare annual reports in which shall be summarized the events of the year preceding having relation to commerce and trade, and especially as such happenings affect existing or prospective trade with the United States. These reports furnish the material used in preparing the annual volume known as "Commercial Relations of the United States." Heretofore the fiscal year ending with June was the period included in annual reports. This regulation, made many years ago and when means of communication were slow and methods cumbersome, was changed upon request from the Department of Commerce and Labor, and consular officers were instructed by the Department of State to prepare annual reports to cover the preceding calendar year. The calendar year, constituting the statistical year in the principal commercial countries for official compilations, affords better facilities for collecting and collating information, and its designation furnishes a uniform period of time for calculations and comparisons. Moreover, it constitutes the statistical period in the measurement of their business by most of the great business concerns, individual and corporate, of all countries. Another advantage to be secured by the change is the earlier publication of Commercial Relations, which has heretofore included a history or review of the world's commerce for a period terminated twelve or fifteen months prior to the issuance of the volume. To secure early publication of Commercial Relations for the calendar year 1906 consular officers were instructed in a circular letter of the Department of State, dated June 30 of that year, to prepare reports in time for transmission as soon after the close of the year as practicable. This instruction was generally followed, but failure to

receive reports from a number of consulates, including several of the more important, has contributed to delay in the preparation of the work and made it necessary for the Bureau to supply the missing material from available official data. Notwithstanding this obstacle it is expected to have the volume published in time for presentation to Congress in the first days of the approaching session.

There were received during the year 43,364 pieces of mail matter, of which 18,715 were letters, 7,917 cards and circulars, and 16,732 pamphlets, periodicals, and newspapers. The letters written numbered 6,895.

In addition to Daily and Monthly Consular and Trade Reports there were mailed Commercial Relations and other publications of the Bureau to the number of about 12,000.

Very respectfully,

JOHN M. CARSON,
Chief, Bureau of Manufactures.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

REPORT

OF THE

DIRECTOR OF THE CENSUS

REPORT

OF THE

DIRECTOR OF THE CENSUS.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF THE CENSUS,
Washington, November 1, 1907.

SIR: I have the honor to submit the following report upon the operations of the Bureau of the Census during the fiscal year ended June 30, 1907, and upon the work for the coming year as now outlined. The report covers the fifth year of the existence of the permanent Bureau under the act of March 6, 1902, and the eighth year of its existence as an office under the act of March 3, 1899. During three months of the year the Director was absent from the country at the request of the Department of State, and the Bureau was in charge of Mr. William S. Rossiter, chief clerk. The fidelity and good judgment with which he administered the office during this period can not be too highly commended.

EXPENDITURES DURING THE FISCAL YEAR.

The financial statement of Mr. Thomas S. Merrill, disbursing clerk of the Bureau of the Census, attached as Appendix A, shows in detail the appropriations for the Bureau during the fiscal year covered by this report and the actual expenditures under each item.

The appropriations made specifically for the fiscal year covered by this report aggregate $1,136,600. This, together with certain reappropriated balances of the preceding year's appropriation, to wit, "Collecting Statistics," $149,980.67, and "Tabulating Statistics," $30,931.13, and the $65,000 expended from the 1908 appropriation for "Collecting Statistics," which was made immediately available, made the total amount available during the fiscal year 1907, $1,382,511.80. The total expenditures were $1,362,173.93, leaving an unexpended balance of $20,337.87 to be covered into the General Treasury.

The total appropriations for the current fiscal year, including the allotment for printing, aggregate $1,490,940.

Mr. Merrill's report also contains a statement showing the amounts appropriated for the maintenance of the Census Office each year since its establishment in 1899 and the amounts actually expended.

CLERICAL SITUATION IN THE BUREAU.

An unfortunate clerical situation has been gradually developing in the Census Bureau since the establishment of the permanent Office. Practically all of the clerical force has been in the Bureau since it was originally established. They have thus grown up together and been trained together and have developed their respective aptitudes. Many of them have become highly efficient in special lines of work and are qualified to render the best possible service at the Thirteenth Census. In all other bureaus of the Government, long established, the clerical force represents a gradual process of appointment, and clerks are promoted, as their fitness is demonstrated, to recurring vacancies at higher salaries. In the Census Office, on the other hand, there are not enough higher grade positions allowed by law to permit of promotion in accordance with merit. In consequence a number of Census clerks are discharging important supervisory duties, while paid the same salaries as the clerks whose work they direct. Elsewhere in the service they would receive a compensation based upon this fact. In the Census, as now organized, this is impossible.

Moreover, the census appropriation divides the main body of the clerical force into two divisions, one of 300 clerks at $1,200; the other of 192 clerks at $1,000. Ninety per cent of the clerks in both classes have been in the service for an equal length of time. At least 50 per cent of the $1,000 clerks are as well trained and qualified, as industrious and efficient, as are 50 per cent of the $1,200 clerks and are doing the same character of work, both in quantity and quality, side by side with them.

The glaring injustice of this situation is obvious. Necessarily it creates dissatisfaction, discontent, and something approaching demoralization. It makes the duty of the Director in determining promotions to the few vacancies which occur through resignation, death, and transfer most trying and disagreeable. No clerk can be selected for promotion without the knowledge that dozens of others are equally entitled to it.

As a result of this situation there is a systematic effort to escape from this Bureau by transfer to some other bureau or department where the opportunity for promotion seems greater. The Census has lost in this way since its permanent organization nearly 50 of its best clerks. One of the main purposes of establishing a permanent Census Office—to retain a trained body of clerks to handle the work of the decennial period—is thus being gradually defeated. The situation is so acute that I deem it my duty to direct your attention to it in this manner and to request that Congress may be urged to supply a remedy by the readjustment of the clerical salaries of the Bureau.

Even should the readjustment recommended in the estimate for the next fiscal year be granted by Congress, the proportion of employees in grades above $1,200 will still remain far below the proportion which obtains in every other bureau of the Government. A year ago I submitted a tabular statement which showed that only 7.2 per cent of the clerical employees in the Census Office received above $1,200, while the general average of these employees in all other departments of the Government was above 50 per cent.

WORK OF THE BUREAU SINCE LAST REPORT.

The work of the Bureau is represented by reports published, reports completed and awaiting publication, and reports the field-work and compilation of which are in progress. The following is a complete list of the Census publications since the last annual report:

VOLUMES.

	Pages.
Mortality Statistics: 1905	360
Manufactures, Part I (United States by Industries)	1010
Manufactures, Part II (States and Territories)	1244
Wealth, Debt, and Taxation	1246
Statistics of Women at Work	400
Statistics of Cities over 30,000: 1905	372
Prisoners and Juvenile Delinquents	296

BULLETINS.

	Number.
Census of Manufactures, 1905:	
New York	59
Pennsylvania	60
Canning and preserving, rice cleaning and polishing, and the manufacture of beet sugar	61
Glass and clay products	62
Butter, cheese, and condensed milk, flour and grist mill products, and starch	64
Coke	65
Automobiles and bicycles and tricycles	66
Metal working machinery	67
Petroleum refining	70
Boots and shoes, leather, and leather gloves and mittens	72
Electrical machinery, apparatus, and supplies	73
Textiles (combined textiles, cotton manufactures, hosiery and knit goods, wool manufactures, silk manufactures, flax, hemp and jute products, and dyeing and finishing textiles)	74
Agricultural implements	75
Lumber and timber products	77
Iron and steel and tin and terne plate	78
Printing and publishing	79
Paper and wood pulp	80
Shipbuilding	81
Musical instruments, attachments, and materials	82
Slaughtering and meat packing, manufactured ice, and salt	83
Carriages and wagons, and the steam and street railroad car industry	84
Pens and pencils, buttons, needles, pins, and hooks and eyes, oilcloth and linoleum, and turpentine and rosin	85
Copper, lead, and zinc, smelting and refining	86
Tobacco	87
Power employed in manufactures	88
Population of Oklahoma and Indian Territory: 1907	89
Supply and distribution of cotton for the year ending August 31, 1906	63
Child labor in the District of Columbia	68
Child labor in the United States	69
Estimates of population: 1904, 1905, 1906	71
Cotton production: 1906	76

These reports represent more than 6,000 printed quarto pages, largely tabular matter. They include the final results of two of the great inquiries committed to the Bureau during the intercensal period: the report on Wealth, Debt, and Taxation, and the quinquennial census of Manufactures. The former report covers (*a*) the estimated value of all tangible property in the United States, (*b*) the debts of the national, state, and local governments, (*c*) the assessed

valuations of property taxed by the state and local governments, and the taxes levied by them, and (*d*) the receipts and payments of the national, state, and local governments. The wealth of the nation is given for 1900 and 1904, while the other data refer chiefly to the year 1902. In connection with the statistics on assessed valuations and tax levies, the report contains an abstract of the revenue laws of the several states, showing the taxes and other revenues provided for the state, county, township, city, and other local governments. This abstract was prepared by Prof. Carl C. Plehn, of the University of California, and is the most comprehensive compilation of this character ever made. Its value to students of taxation and kindred topics, both in this country and abroad, has been established in a most gratifying manner by the correspondence which has followed its publication.

The wisdom of Congress in authorizing the five year census of manufactures has been abundantly justified by the results, which determine with exactness the surprising and unprecedented advance made in all branches of manufacturing industry since the census of 1900. The division of manufactures is now engaged on a supplementary analysis of the wage statistics of this census of manufactures, which will be published during the year.

Two reports in the above list (Women at Work and Child Labor) represent further studies from the returns of the Twelfth Census. These data, never before compiled, present the exact proportions and locations, geographically and by industries, of a phase of labor now attracting widespread attention, and supply the basis for the special investigation of all the conditions surrounding the employment of women and children, which was authorized at the last session of Congress.

CURRENT WORK OF THE BUREAU.

The Bureau has been engaged during the year upon the fieldwork for the reports upon marriage and divorce, religious bodies, criminal judicial statistics, transportation by water, and the annual reports upon mortality, statistics of cities, cotton production, and cotton consumption.

The fieldwork upon marriage and divorce was substantially completed on October 1. There were employed in it, at intervals, 138 of the regular clerical force of the office, 220 special agents (including some cotton agents), and 775 county clerks. The services of the latter were utilized in remote counties where the number of divorces was comparatively small, in order to save the traveling expenses and subsistence of detailed clerks. The data have been secured for 1,275,000 divorces, applied for in 2,880 counties in the United States in the twenty years since 1886, when the last report on this subject was made by the Department (now Bureau) of Labor. The compilation and analysis of the statistics will occupy the Bureau during the coming winter and spring.

The data for the decennial census of religious bodies have been secured almost wholly by correspondence, at a comparatively small expense. Substantially complete statistics have been received from 78 denominational bodies, and the final reports will be received during the fall. The Director acknowledges the cordial and effective cooperation of the church authorities of nearly every denomination in the

collection of these statistics. Their compilation and analysis is now in progress in the Bureau.

The statistics for the decennial report upon transportation by water were collected by 43 detailed clerks and 3 special agents. The fieldwork was substantially completed on September 1. The compilation of the tables has already made satisfactory progress.

By direction of the Secretary of Commerce and Labor, the Census Office, in collaboration with the Forest Service Bureau of the Department of Agriculture, undertook during the past year the compilation of the annual statistics of the lumber-cut of the United States. The experts of the Bureau of Forestry were given full control over the technical details of the report, the Census Office conducting the correspondence and the compilation of the statistics. The results were made public by states, as fast as completed. The final result, published in July last, was the most complete report of the annual lumber-cut ever compiled. It showed this cut to be 37,490,067 M feet B. M., probably the largest in the history of the country.

It is the understanding that this cooperative work between the Census Office and the Forest Service is to continue from year to year. It affords an excellent illustration of the relationship which seems likely ultimately to be established between the Census and various other technical bureaus of the government, and is another evidence of the advantages which spring from the establishment of the permanent Census Office. It is a practical demonstration of the true function of the Bureau in a harmonious reorganization of the autonomy of the general business administration of the Government.

CRIMINAL JUDICIAL STATISTICS.

In compliance with the act of Congress of June 7, 1906, authorizing the collection of criminal judicial statistics, active fieldwork in connection with the inquiry was begun in June, 1907, and at the present time 50 clerks are engaged in collecting data from the court records. The items of information sought embrace the entire procedure in each criminal case reported, from the commencement of proceedings until the final disposition of the case, together with certain items of personal description of the accused prescribed by the act.

In view of the enormous number of cases and the experimental nature of this first report in an entirely new field of statistical inquiry, it was deemed wise to confine the inquiry to the disposition of major criminals, and not only to exclude certain lower courts having a limited jurisdiction, but also to confine the inquiry to limited areas in each state. It is hoped that from this inquiry the following results may be obtained: *First.* A record in detail for the year 1906 of the disposition of all major criminal cases within the territory covered. This will include all cases originating prior to 1906, but tried and finally disposed of in this year; for cases filed during 1906, but continued beyond this year, the progress of the case until the end of 1906 will be shown. *Second.* A survey of the criminal court systems in the different states, accompanied by such presentations of the penalties provided by the criminal codes of the various states as is necessary to elucidate the statistics.

In addition to the investigations now under way, as above stated, there remain untouched, of the reports authorized by Congress, the

census of fisheries, to be made in cooperation with the Bureau of Fisheries; the report on express companies, to be made in cooperation with the Interstate Commerce Commission; the report on savings institutions; and the quinquennial report on the electrical industries.

These investigations, together with the annual reports committed to the Bureau, will keep the present force fully occupied until July 1, 1909, after which date the energies of the present clerical force should be concentrated upon the preliminary work of the Thirteenth Census. No increase in the clerical force for the purposes of that census will be necessary prior to April, 1910.

CENSUS COTTON REPORTS.

The season of 1906–7 marked the fifth consecutive year in which the Census reports on cotton ginned have been collected by local special agents, and the results were the most satisfactory since the inauguration of this work. The opposition of certain ginners to making these returns has practically disappeared, and the reports issued semimonthly during the harvesting and the final report at the close of the season, fixing the volume of the crop of 1906, have been accepted by the trade as correct and trustworthy. The superintendent of the New York Cotton Exchange in his last annual report says: "It is pleasant to find that the Census report proved so accurate. The trade feels that it is of most valuable assistance to the individual in forecasting the probable crop, because it correctly indicates the actual yields of the different states, irrespective of how the cotton reaches the market." The cotton "supply and distribution" report is a check on the returns of production; and the fact that the disparity between the two reports is less than was the case last year is a further verification of the accuracy of the ginners' returns. Progress has been made in perfecting the field organization for collecting the statistics of cotton ginned. The number of local agents has been increased from 711 for the season of 1906–7 to 724 for next season, an increase made necessary by the recent development of the cotton growing industry in western Texas, and the reorganization of the proposed state of Oklahoma in accordance with the new county boundaries.

An important modification of previous methods in the promulgation of the cotton ginning reports will be undertaken during the season of 1907–8. The hour of making these reports public has hitherto been 2 p. m. Hereafter they will be made public at 10 a. m. on the day following the close of each semimonthly canvass, except when this day falls on Sunday, when the report will be made public on the following Monday. There are three reasons which justify the belief that this change of hour will prove a decided advantage:

1. There will be no unnecessary waiting for results on the part of trade interests, as the reports will be announced practically at the opening of business (10 a. m.) on the morning following the day on which the canvass closes.

2. The publication of these reports at 10 a. m. will permit the results to reach Europe within trading hours on the day of their publication in America. This is in line with the earnest requests of European spinners of American cotton. It is believed that by enabling them to trade on these reports in their own markets on the dates of

publication the fluctuations in the price of cotton and speculation in the product will be materially reduced.

3. Between the hours of 6 p. m., when the agents complete their canvass and compile their county summaries for telegraphing, and 10 a. m. of the following morning, when the summary will be published in Washington, no business is transacted on cotton exchanges in this country and hence under this plan no improper use of the data is possible.

The success of the Census Office in obtaining accurate statistics of the annual cotton crop through the cooperation of the ginners has led several of the cotton growing states to enact legislation for obtaining similar information through state agencies established for that purpose. Alabama and Texas have passed laws of this character, and other states have the subject under consideration. Cooperation between state bureaus and the Census Office, in a work of this character, should result in more complete and accurate returns than are otherwise possible, provided that cooperation is conducted on uniform lines and by uniform methods. Otherwise there can only follow confusion and discrepancy. This fact was realized by the director of the Alabama Bureau of Cotton Statistics, who, shortly after his appointment, conferred with the Director of the Census with a view to determining the possibility of an arrangement to that end. The result of this conference and of subsequent correspondence was a complete understanding between the two bureaus; and the Alabama legislature, at its recent session, repealed its original law and enacted a new statute embodying this understanding. Under this law the state and federal returns of cotton ginned will be collected and published on identical dates, thus avoiding any confusion in the public mind as to the relative significance of the figures. The Census agents will supply their returns to the Alabama bureau simultaneously with their transmission to Washington, and without cost to the state; and any discrepancies which appear in the returns for the state, as compiled by the two offices, will be immediately investigated, and the error located and corrected.

The most conspicuous advantage of this plan of cooperation between the state and federal bureaus grows out of the fact that the Alabama law makes it compulsory for the ginner to supply these reports to the state bureau through such agents as it may designate, fixes a severe penalty for refusal or for the making of inaccurate returns, and provides the necessary legal machinery for the prompt enforcement of the requirements. Thus the federal Census will get the full benefit of the state law requiring regular and accurate reports. The state can require such reports and enforce such penalties, within its own jurisdiction, without arousing the antagonism and suspicion which would follow if the United States Government were to attempt a similar procedure under the Census laws.

In developing the annual Census reports on the supply and distribution of cotton, it has become necessary for the Bureau to make European connections through which annual data relative to cotton consumption and manufacture in foreign countries can be promptly secured. In view of the fact that a large percentage of the American crop is exported, it is necessary to know the quantity of stocks held throughout the world at the close of the commercial year, as a guide

in arriving at the possible future demand for the American crop. With a view to establishing channels through which to obtain this information, Mr. D. C. Roper, chief of division in charge of cotton statistics, was instructed to attend the Fourth International Cotton Congress, which convened in Vienna, May 27–31, to explain to the Congress the methods of the Census Office in collecting cotton statistics, and to arrange plans of cooperation with foreign manufacturers and organizations in obtaining this necessary data for the annual report on the supply and distribution of cotton. As a result of Mr. Roper's efforts, an agreement has been signed between the Director of the Census and the International Federation of Master Cotton Spinners' and Manufacturers' Associations, in which the Federation agrees to collect and furnish the Census Bureau information relative to spindles, stocks, and consumption of cotton for practically all foreign countries. This Federation has been in existence only about four years; and inasmuch as it has to rely at present upon the mails for its returns, the Census Bureau may not be able to secure for the present, all the foreign statistical information desired; but it will secure whatever the Federation is able to collect, together with information arranged for through other European sources; and thus the Bureau will be enabled to materially extend the scope of its reports dealing with the world's cotton industry as of September 1 of each year.

VITAL STATISTICS.

The annual report on Mortality Statistics, 1905, has been published and distributed. It embraces returns of 545,533 deaths that occurred in the registration area only of the United States during the year, or rather more than the number (520,031) that occurred in England and Wales during 1905. The report for 1906 is in an advanced stage of compilation and will probably be ready at an earlier date than that for the preceding year, although the number of deaths (over 655,000) considerably exceeds the number for 1905, owing to the inclusion of new registration territory, as explained in my last report. Steps are now being taken to ascertain whether any states are admissible as having a fairly complete registration of births; and it is believed, on account of the increasing interest shown in this subject by registration officials and a more apparent disposition to enforce existing laws, that a registration area for births may be constituted at an early date. Much help is expected in this and other matters from the organization of a national association of registration officials, under the auspices of the American Public Health Association, especially in the standardization of registration returns. A recent Census pamphlet on "Modes of Statement of Cause of Death and Duration of Illness upon Certificates of Death" explains the importance of this movement. It is also gratifying that the Conference of Commissioners on Uniform State Laws, at its recent meeting at Portland, Me., decided to cooperate with the Census in promoting the adoption of satisfactory legislation.

The extension of the registration area by the inclusion of new registration states is proceeding apace. There were ten registration states in 1900—Connecticut, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Rhode Island, and *Vermont*—besides the District of Columbia (city of Washington).

Of these, two—Maine and Michigan—were added during the previous decade, while Delaware was dropped. In 1906 five additional states were included—California, Colorado, Maryland, Pennsylvania, and South Dakota. Complete laws were enacted in 1907, which should bring Minnesota, Montana, North Dakota, Wisconsin, and perhaps other states into the list. Earnest efforts will be made by the state authorities in Kentucky, Ohio, and Virginia to secure adequate legislation in 1908; and Illinois, Kansas, and other states will endeavor to secure it in 1909. But since 1900 no registration cities in nonregistration states have been added, although it is entirely practicable for many cities in states which are not likely to secure effective state registration for some years to come to at once pass local ordinances for this purpose and so execute them as to obtain complete registration of deaths. As soon as this is done and the results tested the cities can at once be admitted into the registration area.

REPUBLICATION OF THE 1790 CENSUS.

The sundry civil appropriation act of 1906–7 contained a provision directing the Director of the Census to publish, by counties and minor civil divisions, the names of the heads of families returned at the first census (1790) of the United States, and to sell such publication, the proceeds to be deposited to the credit of "miscellaneous receipts" in the Treasury Department. The statute contained a proviso that "no expense shall be incurred hereunder, additional to appropriations for the Census Office, for printing therefor, made for the fiscal year 1907." In other words, the Census Office was required to publish the 1790 census out of a printing appropriation which had been estimated on the basis of its requirements for the regular work of the Office, authorized and directed by law. As these authorized reports were of important current interest, the Director did not feel warranted in delaying the publication of any of them in order that the reprint of the census of 1790 might be given precedence. There were therefore only sufficient funds in the printing appropriation of the last fiscal year to permit of the publication of the 1790 census for three states—Vermont, New Hampshire, and Maryland. These were published in three separate parts, and offered to the public at $1 a part. They were printed in exceptional typographical form, and were made additionally valuable by the inclusion of an authentic map of each state, first published in 1796. The total cost of printing the census of these three states was $6,566.24. At this writing subscriptions have been received for the pamphlets which aggregate $1,200, and the Office is in daily receipt of additional subscriptions. The edition of each state publication is 2,000; and if the demand for them shall continue until the edition shall be exhausted, the Government will be made whole. Subscribers to these three states have frequently indicated their desire for one or more of the other states. They have been informed that further publication is dependent upon the action of Congress, and the removal of the restriction of law which requires the publication to be made from the census printing appropriation for 1906–7. The public interest aroused by the three parts already published justifies a recommendation that the completion of the work be authorized.

The remaining states of which the records of the census of 1790 are intact are Connecticut, Maine, Massachusetts, New York, North Carolina, Pennsylvania, Rhode Island, and South Carolina. The records for Delaware, Georgia, Kentucky, New Jersey, Tennessee, and Virginia were destroyed at the time of the burning of the Capitol by the British forces during the war of 1812.

CENSUS OF OKLAHOMA.

On June 20, 1907, the President, through the Secretary of Commerce and Labor, and under the authority conferred by section 8 of the organic act of the Department, ordered the Director of the Census to take a census of the population of the territory of Oklahoma and Indian Territory, comprising the proposed new state of Oklahoma. The directions were to undertake the work at once and complete it with all possible expedition. Plans were immediately made, and the general order covering these plans was made public on June 24. The immediate conduct of the fieldwork was placed in charge of Mr. William C. Hunt, chief statistician for population. The territory was divided into five districts, and a chief of division of the Census Office was assigned to the charge of each. The census of Oklahoma was therefore supervised at every point by men thoroughly trained in census methods, and familiar with all the details of the work. The result has been the quickest piece of Census work ever accomplished, and, in view of the many difficult conditions encountered, probably the most efficient. A corps of census clerks, twenty-five in number, including stenographers, proceeded to Guthrie, Oklahoma, on June 30, where ample office quarters in the city hall were assigned them by Governor Frantz. The district supervisors were likewise provided for at their several headquarters, by the judicial and other federal authorities having jurisdiction. Every facility and assistance was accorded the representatives of the Census by the local authorities, of all political faiths, and the work of enumeration, when once under way, proceeded rapidly to a conclusion, the last returns being received by the supervisor in charge on September 10. Considerable delay in the fieldwork necessarily occurred, owing to the difficulties encountered in properly adjusting and describing the enumeration districts, by reason of insufficient data, local uncertainty as to boundary lines, and the unsettled condition of parts of the country, particularly in the Indian Territory. The two territories were divided into 1,473 enumeration districts; and as fast as the enumerators were selected, commissioned, and instructed they entered upon their work. These enumerators were selected, so far as possible, without regard to partisan politics, preference being given, wherever possible, to the substitute city letter carriers and substitute rural free delivery agents of the Post Office Department, presumed to be thoroughly familiar with their localities. Students in the educational institutions were also sought, and in many districts the services of the Census cotton ginning agents were utilized. The schedule employed was the simplest possible, and related only to the relationship of each person to the head of the family, color or race, sex and age.

The enumeration revealed a population in both territories of 1,414,177. A detailed statement of the results of the census, by Con-

gressional districts, counties, and minor civil divisions, has just been published. The cost of the fieldwork for the census of Oklahoma was $70,000.

OFFICIAL REGISTER.

The Bureau is now also engaged in the compilation of the Biennial Official Register of the United States (otherwise known as the "Blue Book"), publication of which was transferred from the Secretary of the Interior to the Director of the Census, by the act of June 7, 1906. In making preparations for the Register for 1907 it became evident that radical steps must be taken to reduce the size of the volumes. The civil service has been increasing so rapidly that the Official Register has grown from a volume of 175 pages in 1816, when the first issue appeared, to two volumes of 1,756 and 2,480 pages, respectively, a total of 4,236 pages, in 1905. For several decades after 1816, the Register was issued at frequent though irregular intervals; and the increase during each ten-year period was approximately 50 per cent in both pages and number of names. The following table indicates the increase in the size and cost of the publication since the first issue:

YEAR.	Volume.	Pages.	Approximate number of names.	Index (pages).	Cost.	Printer.
1816		175	6,767			J. Elliott.
1821		257	9,443			Davis & Force.
1831		407	13,431			W. A. Davis.
1841		637	25,666			Thomas Allen.
1851		1,091	39,631			Gideon & Co.
1863		824	60,000		$3,681.02	Government Printing Office.
1871		1,244	92,370		8,115.98	Government Printing Office.
1881	Volume I	881	52,540	134	11,666.66	Government Printing Office.
	Volume II	892	74,480	196	11,843.77	Government Printing Office.
1891	Volume I	1,179	71,820	189	15,144.10	Government Printing Office.
	Volume II	1,425	114,380	301	17,883.61	Government Printing Office.
1893	Volume I	1,221	72,960	192	15,739.89	Government Printing Office.
	Volume II	1,546	123,120	324	19,580.39	Government Printing Office.
1895	Volume I	1,228	74,800	187	19,336.92	Government Printing Office.
	Volume II	1,580	133,000	334	24,669.52	Government Printing Office.
1897	Volume I	1,269	76,000	190	19,841.30	Government Printing Office.
	Volume II	1,474	134,000	338	23,358.20	Government Printing Office.
1899	Volume I	1,561	108,896	249	24,227.92	Government Printing Office.
	Volume II	1,567	142,800	357	24,669.75	Government Printing Office.
1901	Volume I	1,602	109,962	278	24,834.17	Government Printing Office.
	Volume II	1,798	160,895	400	28,060.19	Government Printing Office.
1903	Volume I	1,698	123,200	308	26,620.35	Government Printing Office.
	Volume II	2,247	201,600	504	34,057.30	Government Printing Office.
1905	Volume I	1,756	128,000	322	29,504.43	Government Printing Office.
	Volume II	2,480	218,000	547	41,304.23	Government Printing Office.

The table shows that the cost of the last issue was approximately $71,000. The two volumes required to present the material contained in the last Official Register weighed together nearly 30 pounds. The space required to include merely the index is sufficient to form a large volume. In weight, number of pages, cost, and general unwieldy character the Official Register in its present form more than reached the limit of its usefulness in 1905.

The forthcoming Register would contain, on the old basis, not less than 350,000 names, necessitating an increase of about one-third in the size of the publication. The question of cost thus became a matter for serious consideration.

The Director of the Census therefore consulted with the Printing Commission of Congress and obtained its cordial approval to plans

for reducing the bulk, and at the same time increasing the usefulness of the Official Register. The most radical feature of the plan was that which disposed of the necessity for an index by printing the names of all Federal employees, irrespective of the department in which employed, in alphabetical order, under appropriate symbols indicating their official location.

The next step was the elimination from the Register of the names of all temporary employees, and of substitute employees in the Post Office Department. It is estimated that the names thus eliminated aggregate 60,000. Not more than 5 per cent of the temporary employees of the Government on July 1 in any year are still in the service at the date when the Register is published, and to include their names is to cumber the volume with worthless data. Other less important modifications undertaken on the suggestion of the Congressional Printing Committee will still further reduce its bulk and cost. It is respectfully suggested in this connection that the several statutes relating to the Official Register be revised and reenacted, with a view to further curtailment.

By the act of 1895 the information to be contained in the Official Register must be furnished July 1, and the Register compiled and published by December 1 following, in order to be of service to the incoming Congress. As July 1 is the beginning of the fiscal year, at which time many changes occur, obviously the data can not be supplied until brought up to date for the new fiscal year. This requires from 30 to 60 days, and so great has become this undertaking, as heretofore conducted, that the resources of the Interior Department for the compilation and of the Government Printing Office for the mechanical production have not been sufficient to complete the publication as required by law, and in the case of the last issue the second volume was not published until the succeeding May.

In order to make it possible to publish the Register on the date established by law, the Director of the Census detailed to the several departments of the Government such number of Census clerks as they requested, in order to prepare their lists of employees within the month of July. Even with the assistance thus rendered complete returns from a number of the departments were not obtained until about September 1. Nevertheless, it now appears probable that the Register may be published practically upon the date fixed by law. It will include, in addition to the customary data, a statistical analysis of the Civil Service of the United States, similar to that contained in Census Bulletin 12.

COST ACCOUNTING SYSTEM.

During the past fiscal year a cost accounting system has been put into operation in the Bureau of the Census for the purpose of determining the cost of clerical labor required for various Census inquiries and for different classes of work, both of which are matters of much consequence in the administration of this Bureau. This system is proving itself to be complete, inexpensive, and flexible. It is an adaptation of the electrical system of tabulating employed at the Eleventh and Twelfth censuses. Under the system established every employee is assigned a number and at the close of each working day fills out a time slip, accounting for the day's work. These slips are turned in

to the time clerk of each division, who is responsible for the delivery to the cost accounting room of a slip properly filled out for each clerk upon the rolls of the division. A card is then punched for each entry upon the time slip, showing date, employee's number, division, and salary, the inquiry, character of work, time employed upon it, rate of remuneration, and the money value of the work.

The work of the Census is grouped under nine main classes, and these in turn are subdivided into 42 minor specifications, designating the different kinds of work performed in the Bureau. By this system an accurate distribution of the cost of the clerical operations of the Census is obtained for each month within six days after the close of the month, and the Director thus has at hand information, both by months and cumulative for the year, concerning the cost, not only of inquiries, but also of classes of work, and can obtain from the cards additional detail at any time it may be required. In addition to this information, sick and annual leave are tabulated each month, and the proportion which each bears to the various inquiries and classes of work is shown. It is thus possible to watch intelligently the tendencies of the clerks in connection with these two ever present classes of expenditure, and to judge of the effect of kinds of employment upon the employees of the Bureau.

By this system every dollar expended for clerical labor in the Bureau of the Census is distributed against some item or items, and by those classifications which are most helpful to the Director in organizing and conducting the work of the Bureau. The cost of maintaining this system is scarcely two-tenths of 1 per cent of the amounts distributed.

TABULATING MACHINERY.

The work of developing a system of tabulating machinery for the compilation of the Thirteenth and subsequent censuses progressed so satisfactorily during the year that it became necessary to vacate the cramped quarters assigned to this work in the Bureau of Standards, and to establish our own machine shop in the Census building. This shop has been properly equipped for the continuance of the experimental work connected with the development of an entirely new system of mechanical tabulation, and for the construction of the machines. With this machine shop, the building and repair of machinery can be done much more effectively and economically by the Bureau than by contract with private manufacturers. A force of seven expert mechanicians is now regularly employed in the work. Machines have already been devised and constructed which are in daily and successful use in the current work of the Bureau. While the time has not yet come for a detailed statement of the results of this experimental work, it is proper to add that the results already attained exceed the most sanguine hopes entertained at the time the recommendation to undertake it was approved by Congress.

LEGISLATION FOR THE THIRTEENTH CENSUS.

The time is rapidly approaching when preparations for the taking of the Thirteenth Census must begin. The first step to that end is the framing of the law under which this census is to be taken and its

enactment by Congress. A bill for that purpose should become a law during the first session of the Sixtieth Congress. The Director of the Census is entitled to at least two years in which to prepare for the greatest single piece of work which the Government undertakes; and in order to make this preparation intelligently and to the best possible advantage, he should know, for that length of time, just what are the provisions of the law under which the work is to be undertaken.

The most serious faults in all previous censuses have been due to the lack of sufficient time, prior to the actual enumeration, to select and instruct the supervisors and enumerators. The supervisors should be designated at least one year in advance of the enumeration, so that the enumeration districts can be laid out and their geographical limits clearly defined and scrutinized in each locality, with a view to the correction of omissions and errors. This has never yet been possible at a federal census. With this end in view, and under instructions from the chairmen of the census committees of both Houses, the officials of the Bureau have been engaged for a number of months in a critical study of the Twelfth Census act, as tested by practical experience.

The law under which the Twelfth Census was taken is undoubtedly the most effective census law ever enacted. The results achieved under it were far more satisfactory from every point of view than at any previous census. It made possible the prompt compilation and publication of the main reports, by postponing all work not dependent upon enumeration proper until after the completion of these main reports. By the continuance of this plan all the subsidiary inquiries will hereafter relate to decennial periods differing from those of the census proper, but definitely comparable with the like statistics for ten-year periods. The establishment of the permanent Census Office made it possible for this adjustment of the work to continue indefinitely, with constantly increasing efficiency.

The main amendments in the census act of 1899 necessary are such as are required to fit it into and harmonize it with the permanent census act. When this has been done, there will be two distinct census codes, one for the decennial period covering three years in each decade, and the other relating to the permanent office and the intermediate work. These two codes should so dovetail that they will automatically work in harmony with each other without periodically disrupting the permanent organization, but simply grafting upon it the temporary organization at decennial periods.

A thorough consideration of all the conditions confirms the view that it is necessary during the three year decennial periods, that the permanent Census Office shall cease to be provided for in the annual appropriation acts and that its expenditures of every character should be paid out of the lump sum appropriation for the Thirteenth and subsequent censuses. Any other adjustment will lead to much confusion in the adjustment of disbursements, and will greatly hamper the work and decrease the efficiency of the organization.

There were three appropriations for the Twelfth Census—the preliminary appropriation of one million dollars, made by the Twelfth Census act approved March 3, 1899, and the subsequent appropriations amounting to $12,516,210—not all of which was expended for the decennial census proper. It is now estimated that a lump sum

appropriation of fourteen million dollars will be necessary for the expenses incident to the three-year decennial period. If it shall be decided by Congress that the censuses of Porto Rico and the Philippine Islands shall be taken as a part of the Thirteenth Census of the United States—either as of the same date, or at dates ten years from the dates as of which these censuses were previously taken by the War Department—1909 for Porto Rico and 1913 for the Philippines—then an additional appropriation of one million dollars will be required.

In estimating the cost of the Thirteenth Census as the same, approximately, as that of the Twelfth, I have in mind certain economies which existing conditions seem to render possible. The cost of the preliminary work of the Twelfth Census will now be largely met out of the regular appropriations for the permanent Office prior to and including those for 1909. The machinery it was necessary to construct and put in motion at the Twelfth Census is now ready and at hand, including a large part of the necessary furniture and fittings. It is estimated that there can be a saving of approximately half a million dollars, due to the fact that the Census Office will own and operate its own tabulating machinery, and that this machinery will be more rapid and efficient than that previously employed. It now seems probable that the saving due to these causes will be sufficient to equal the additional cost of enumerating 25,000,000 more people than were counted at the Twelfth Census.

Certain other sources of economy may be referred to. The annual mortality reports will make it possible to reduce the number of the main reports from four to three. It is the unanimous judgment of the census experts that with these annual reports covering the mortality of the registration areas, it is a useless expense to continue to collect death returns for the rest of the population upon an enumerator's schedule. By every test that can be applied the enumerator's returns of deaths are too inaccurate to be worth what they cost. They convey no trustworthy indication of the death rates prevailing in the nonregistration areas. Such death rates for these areas can only be secured by proper state and municipal provision for vital statistics. The absence of any such data in the Thirteenth Census may bring sharply to the attention of these states and cities the necessity for this course.

Another amendment proposed is to abandon the canvass of the household and mechanical industries, in connection with the manufacturing census, thus conforming it to the precedent set in the quinquennial census of 1905. No criticism has ever reached the office upon the omission of this branch of census industrial statistics. The returns received from this group of industries have always been too incomplete and inaccurate to justify their compilation. Their elimination will make it possible to entrust the entire canvass of manufactures to special agents, as was done in 1905, thus withdrawing another schedule from the enumerator, leaving him only the population and agricultural schedules to handle, and in cities the population schedule only. It is plain that the fewer the schedules the enumerator is called upon to understand and to fill out the more accurately his work will be done. There will be a corresponding gain in expedition and reduction in cost. It is deemed necessary, however, to restore the census of mining to the decennial reports, and to make this census in close association with that of manufactures.

In the rapid evolution of industry, mining and manufacturing have become so intimately allied in their processes and so closely associated in ownership and control, that it is no longer possible to accurately enumerate them, except in connection with each other.

Other plans for simplifying the work and reducing its volume are under consideration in connection with the proposed revision of the census law. It is obvious that as the country grows and conditions become more complex the census must be correspondingly simplified, or it will in time become a physical impossibility to compile it within a reasonable time. While the American census reports have come to be regarded by foreign statisticians as the best and most scientific censuses anywhere taken, the criticism has been made that certain branches of it are carried to an unnecessary detail. In the Thirteenth Census the tendency, for the first time, will be distinctly in the direction of condensation instead of expansion.

OFFICE QUARTERS FOR THE THIRTEENTH CENSUS.

The matter of adequate accommodations for the Thirteenth Census should also be brought to the immediate attention of Congress. Although the building now rented and occupied by the Census Office was built for its especial use and in conformity with its own plans, it was wholly inadequate for the requirements. It can accommodate but 2,200 clerks at the utmost, and 3,554 were employed at the height of the Twelfth Census work. The maximum number required to compile the Thirteenth Census will be at least 4,000. It is a great handicap, in work of this character, to be obliged to scatter the clerical force throughout the city in rented buildings, as was the case in 1900–1902. It increases cost, reduces efficiency, and consumes time.

It is evident that a building for the Department of Commerce and Labor, should it be immediately authorized by Congress, can not be ready for occupancy in time for the Thirteenth Census.

It therefore seems wise to seriously consider the possibilities of adapting the present Census quarters to the needs of the Thirteenth Census. The available land contiguous to this building is ample for the purpose, and it would be a wise business transaction for the Government to purchase the plot of land bounded by First and Second streets east and west and B street and the alley north and south. Besides the Census building, this block contains the large four-story building on First street, formerly occupied by the Business High School, and the vacant lot in the rear of this building, facing Second street, which is owned by the Emery estate, which owns the lot and building occupied by the Census Office.

The building formerly occupied by the Business High School, after suitable repairs, will afford accommodations for 1,000 clerks. Upon the lot west of it, owned by the Emery estate, another building can be erected, six or seven stories in height, ample in size to accommodate all the additional clerks required to compile the Thirteenth Census. An ornate and expensive building is not necessary.

The property above described is one that will ultimately be purchased by the Government as necessary to complete the approaches to the Capitol. It is probable that such a purchase will ultimately include the entire block bounded by B and C streets and by First

and Second streets. It can never hereafter be purchased for so reasonable a sum as at present. If a part of the block is to be purchased, to meet the present requirements of the Census, the whole of the block might as well be secured at the same time, as a part of the same transaction, with a view to meeting the future requirements of the Census.

The property upon which the present Census building stands, including the additional lot of 11,000 square feet owned by the Emery estate, covers 106,900 square feet of land, and can be purchased from the estate for the sum of $354,126, which is the original purchase-price option given the Government at the time when the contract for the construction of the building was made between the former Director of the Census and the late M. G. Emery. This option expires July 1, 1908. In the event of condemnation proceedings, judging by experience in connection with the purchase of the land for the two new congressional buildings, it is believed that this price is less than the Government would be called upon to pay. The high school building and site (11,000 square feet) can be purchased for $60,000, making the total cost of the two buildings, and of 117,000 square feet of land, $414,126.

The Government has already paid out for rental of the present Census building the sum of $190,000, or more than one-half the amount for which the entire property above described can now be purchased. It has also paid out, for census purposes, for extra quarters during the Twelfth Census, and for storage room since, the sum of $12,000. There will be necessary, to supply additional accommodations for the Thirteenth Census, a further expenditure for rent of at least $25,000. It is evident therefore that by purchasing this property now the Government will become the owner of it for a price no greater, if as great, as it will have paid out in rental for census purposes by the time the Fourteenth Census is undertaken.

The suggested purchase is therefore a good business proposition, especially as the price asked for the property under consideration is less per square foot than the prevailing price per square foot for any property equally desirable and available in any other part of the city.

If the necessary building above referred to is to be completed prior to the beginning of the Thirteenth Census, the legislation should be enacted at the coming session of Congress. It is estimated that a plain, substantial fireproof building of brick, seven stories in height, with ample accommodations for 2,000 clerks, can be constructed for $300,000. The total appropriation necessary to carry into effect the plans herein outlined would therefore be $714,000.

Respectfully,

S. N. D. NORTH, *Director.*

Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

APPENDIX A.

REPORT OF THOMAS S. MERRILL, DISBURSING CLERK, BUREAU OF THE CENSUS.

1. *Appropriations and expenditures, fiscal year ended June 30, 1907.*

Object.	Amount appropriated.	Amount expended.	Unexpended balance.
Total	$1,136,600.00	$1,362,173.93	[1] $20,337.87
Salaries	717,020.00	698,710.84	18,309.16
Collecting statistics	250,000.00	[2] 464,980.67	.....
Tabulating statistics	([3])	[4] 29,000.00	1,931.13
Stationery	6,000.00	6,000.00	.....
Library	1,500.00	1,500.00	.....
Rent	22,080.00	22,080.00	.....
Miscellaneous expenses	15,000.00	15,000.00	.....
Printing allotment	125,000.00	124,902.42	97.58

[1] To be covered into the General Treasury (surplus fund).
[2] Expended from the appropriation for 1906 which was "reappropriated" ($149,980.67) from the appropriation for 1907 ($250,000), and from the appropriation for 1908, which was made "immediately available" ($65,000).
[3] Unexpended balance on June 30, 1906, reappropriated for fiscal year 1907.
[4] Expended from the appropriation for 1906 which was "reappropriated."

2. *Appropriations for the census from March 3, 1899, to June 30, 1908, and expenditures to June 30, 1907.*

NOTE.—In a number of instances appropriations for the census have been made "immediately available" and unexpended balances have been "reappropriated." In this statement such appropriations are charged against the fiscal year for which they were primarily made, notwithstanding they were used in part for a preceding or a succeeding fiscal year. This accounts for the seeming discrepancy between the appropriations and expenditures for certain fiscal years.

APPROPRIATIONS.

Object.	March 3, 1899, to June 30, 1903.	1904	1905	1906
Total	$13,516,210.00	$1,176,460.00	$1,424,260.00	$1,605,340.00
Expenses of the Twelfth Census	[1] 13,516,210.00	.....	.....	.....
Salaries	.....	685,860.00	711,760.00	745,760.00
Collecting statistics	.....	[2] 174,000.00	438,400.00	[3] 625,000.00
Tabulating statistics	.....	[4] 10,000.00	50,000.00	[5] 40,000.00
Stationery	.....	10,000.00	10,000.00	8,000.00
Library	.....	5,000.00	2,500.00	2,500.00
Rent	.....	26,600.00	26,600.00	22,080.00
Miscellaneous expenses	.....	15,000.00	15,000.00	12,000.00
Printing allotment	.....	250,000.00	170,000.00	150,000.00

Object.	1907	1908	Total.
Total	$1,136,600.00	$1,490,980.00	$20,349,810.00
Expenses of the Twelfth Census	.....	.....	13,516,210.00
Salaries	717,020.00	706,860.00	3,567,260.00
Collecting statistics	250,000.00	[6] 525,000.00	2,012,400.00
Tabulating statistics	([3])	30,000.00	130,000.00
Stationery	6,000.00	6,000.00	40,000.00
Library	1,500.00	1,000.00	12,500.00
Rent	22,080.00	22,080.00	119,440.00
Miscellaneous expenses	15,000.00	15,000.00	72,000.00
Printing allotment	125,000.00	185,000.00	880,000.00

[1] Acts of March 3, 1899 ($1,000,000), June 6, 1900 ($9,000,000), March 3, 1901 ($3,516,210). Available for general Census purposes to June 30, 1905.
[2] Two appropriations, viz, "Special Agents" ($160,000) and "Transcripts of Registration Records" ($14,000).
[3] Made "immediately available" and unexpended balance on June 30, 1906, reappropriated for the fiscal year 1907, was therefore available during the fiscal years 1905, 1906, and 1907.
[4] Title of appropriation was "Rent of Tabulating Machines."
[5] Unexpended balance on June 30, 1906, reappropriated for fiscal year 1907.
[6] $150,000 made "immediately available."

2. *Appropriations for the census from March 3, 1899, to June 30, 1908, and expenditures to June 30, 1907*—Continued.

EXPENDITURES.

Object.	March 3, 1899, to June 30, 1902.	1903	1904	1905
Total	$11,770,051.78	$1,350,271.08	$1,318,710.78	$1,590,356.99
Expenses of Twelfth Census	11,770,051.78	1,350,271.08	293,442.08	101,398.11
Salaries	.....	.....	634,950.49	697,026.44
Collecting statistics	.....	.....	[1] 168,887.54	[2] 558,991.71
Tabulating statistics	.....	.....	[3] 10,000.00	30,087.00
Stationery	.....	.....	9,429.93	8,596.06
Library	.....	.....	4,996.61	2,495.76
Rent	.....	.....	26,600.00	26,585.29
Miscellaneous expenses	.....	.....	14,982.60	14,998.44
Printing allotment	.....	.....	155,421.53	150,178.18

Object.	1906	1907	Total.
Total	$1,248,612.45	$1,362,173.93	$18,640,177.01
Expenses of Twelfth Census	.....	.....	13,515,163.05
Salaries	711,550.62	698,710.84	2,742,238.39
Collecting statistics	354,392.29	[4] 464,980.67	1,547,252.21
Tabulating statistics	9,068.87	[5] 29,000.00	78,155.87
Stationery	7,844.47	6,000.00	31,870.46
Library	2,345.09	1,500.00	11,337.46
Rent	22,080.00	22,080.00	97,345.29
Miscellaneous expenses	11,971.55	15,000.00	56,952.59
Printing allotment	129,359.56	124,902.42	559,861.69

[1] Expended from appropriation "Special Agents" ($159,977.54) and "Transcripts of Registration Records" ($8,910).
[2] Expended from the appropriation for the fiscal year 1905 ($438,364.67) and from the appropriation for the fiscal year 1906 which was made "immediately available" ($120,627.04).
[3] Expended from the appropriation "Rent of Tabulating Machines."
[4] Expended from the appropriation for 1906 which was "reappropriated" ($149,980.67) from the appropriation 1907 ($250,000) and from the appropriation for 1908 which was made "immediately available" ($65,000).
[5] Expended from the appropriation for 1906 which was "reappropriated."

UNEXPENDED BALANCES.

	1904	1905	1906	1907	Total.
Total	[1] $151,191.30	[1] $56,975.11	[2] $55,188.71	[3] $20,337.87	$283,692.99
Expenses of the Twelfth Census	.....	1,046.95	.....	.....	1,046.95
Salaries	50,909.51	14,733.56	34,209.38	18,309.16	118,161.61
Collecting statistics	[3] 5,112.46	35.33	.....	.....	5,147.79
Tabulating statistics	.....	19,913.00	.....	1,931.13	21,844.13
Stationery	570.07	1,403.94	155.53	.....	2,129.54
Library	3.39	4.24	154.91	.....	162.54
Rent	.....	14.71	.....	.....	14.71
Miscellaneous expenses	17.40	1.56	28.45	.....	47.41
Printing allotment	94,578.47	19,821.82	20,640.44	97.58	135,138.31

[1] Covered into the General Treasury (surplus fund), $208,166.41.
[2] To be covered into the General Treasury (surplus fund), $75,526.58.
[3] Of appropriation "Special Agents" ($22.46) and of appropriation "Transcripts of Registration Records" ($5,090).

APPENDIX B.

Clerical and subclerical force.

Chief clerk	William S. Rossiter.
Disbursing and appointment clerk	Thomas S. Merrill.
Chief statisticians:	
Population	William C. Hunt.
Manufactures	William M. Steuart.
Agriculture	Le Grand Powers.
Vital statistics	Cressy L. Wilbur.
Geographer	Charles S. Sloane.
Expert chiefs of division:	
Population	Edward W. Koch.
Manufactures	Joseph D. Lewis.
	Daniel C. Roper.
	Frank L. Sanford.
	Jasper E. Whelchel.
Agriculture	Hart Momsen.
Vital statistics	Richard C. Lappin.
Revision and results	Joseph A. Hill.
Publication	William S. Rossiter.

Total	
Stenographer	1
Clerks, class 4	4
Clerks, class 3	7
Clerks, class 2	25
Clerks, class 1	300
Clerks, $1,000	198
Clerks, $900	17
Expert map mounter	1
Engineer	1
Electrician	1
Skilled laborers, $1,000	2
Skilled laborers, $900	5
Watchmen	10
Messengers	6
Firemen	2
Assistant messengers	10
Skilled laborers, $720	12
Unskilled laborers, $720	8
Charwomen	24
Total	

SPECIAL AGENTS.

Expert special agents	5
Regular fieldwork	17
Cotton agents	718
Experts appointed in connection with the development of tabulating machinery	8
Total number of employees	1,

REPORT

OF THE

COMMISSIONER OF NAVIGATION

REPORT

OF THE

COMMISSIONER OF NAVIGATION.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF NAVIGATION,
Washington, November 11, 1907.

SIR: I have the honor to submit to you my annual report for the fiscal year ended June 30, 1907, as prescribed by law.

Taken in its entirety, the year has been a successful one for the shipbuilding interests, and the prospects are that the current year will be equally prosperous, at least up to the months of April, May, and June, when, from present indications, there will be a falling off in the output of our yards. The output for the past fiscal year has been exceeded but once since 1855, the year of our greatest construction, and for the first four months of the current year the output of our yards exceeds by 65,000 tons last year's product for the corresponding period. The steel tonnage built in the year was the largest in our history. The shipbuilding industry on the Great Lakes is in a particularly thriving condition. The largest vessel ever built for those waters, the *Le Grand S. De Graff*, of 7,971 gross tons, 585 feet long, and 60 feet beam, was built during the year. The fact is significant when it is recalled that only twenty years ago the largest and finest trans-Atlantic liner, the *Servia*, was of but 7,392 gross tons. Fifteen steel steamers of over 7,000 gross tons each were built upon the lakes during the year.

The total number of seamen shipped, reshipped, and discharged before United States shipping commissioners was 259,570, the largest number since the creation of the Bureau of Navigation in 1884. As such shipments and discharges to a very great extent are optional with owners and seamen, the figures point to a popularity of the service which could not exist unless it were administered with some efficiency and to the satisfaction of the interests which it is designed to promote.

Our total documented tonnage, of course, is the largest in our history, and ranks second to British tonnage, which is still, however, much more than double the tonnage under the American flag. Our shipping, however, is almost entirely confined to domestic transportation. In the deep-sea trade our rank continues to be insignificant by comparison with that of the maritime powers of Europe.

It is a matter for especial regret that during the year our only steamship line to Australia was compelled to withdraw its service, although the withdrawal should occasion no surprise, as it has been known for some years that the line was operated at a loss. The ocean-mail pay awarded by the American Government to this line amounted to $283,200 a year for three 16-knot steamers. The competing British mail line from Australia to Vancouver has for some time received a subsidy from Canada and Australia of $321,189 for three 15-knot ships. The British line, of course, has had the additional advantage of the cheaper cost of construction of British ships and the cheaper cost of those factors of operation which are based on first cost, together with the lower wages which obtain on British as compared with American ships. These facts were made known in ample detail to Congress at the last session, and the withdrawal of the line accordingly was possibly anticipated by Congress.

We can not afford to ignore the fact that at the present time the governments of the United Kingdom, of the Dominion of Canada, and of the Commonwealth of Australia and of New Zealand are considering the proposition by increased subsidies to establish an all-British mail route from England by way of the Canadian Pacific Railway to Asia and Australasia. It may be that this discussion will not lead to the approval of specific propositions by the several British governments concerned, but at all events the discussion shows a willingness to consider and prepare to act upon a situation created by our own unwillingness to retain by legislation advantages of superior natural position.

STATISTICS FOR THE YEAR.

On June 30, 1907, the merchant marine of the United States, including all kinds of documented shipping, comprised 24,911 vessels of 6,938,794 gross tons. On June 30, 1906, it comprised 25,006 vessels of 6,674,969 gross tons. The following table shows the geographical distribution, motive power, and material of construction, and trade of vessels of the United States for the fiscal year 1907, in comparison with similar data for the year 1906, and also the construction for the two years:

COMPARISON OF MERCHANT MARINE OF 1906 AND 1907.

Classification.	1906		1907	
	Number.	Gross tons.	Number.	Gross tons.
GEOGRAPHICAL DISTRIBUTION.				
Atlantic and Gulf coasts	17,477	3,427,046	17,193	3,435,314
Porto Rico	59	5,499	62	5,383
Pacific coast	2,787	817,572	2,891	858,649
Hawaiian Islands	49	22,463	50	28,191
Northern lakes	3,052	2,234,432	3,103	2,439,741
Western rivers	1,582	167,957	1,612	171,516
Total	25,006	6,674,969	24,911	6,938,794
POWER AND MATERIAL.				
Sail:				
Wood	11,489	1,643,037	10,738	1,559,340
Metal	129	255,597	128	255,104
Total	11,618	1,898,634	10,866	1,814,444

COMPARISON OF MERCHANT MARINE OF 1906 AND 1907—Continued.

Classification.	1906		1907	
	Number.	Gross tons.	Number.	Gross tons.
POWER AND MATERIAL—continued.				
Steam:				
Wood	7,907	1,190,960	8,359	1,179,984
Metal	1,593	2,784,327	1,691	3,099,384
Total	9,500	3,975,287	10,050	4,279,368
Canal, wood	717	80,137	731	81,773
Barges:				
Wood	3,068	646,074	3,147	680,095
Metal	103	74,837	117	83,114
Total	3,171	720,911	3,264	763,209
Grand total	25,006	6,674,969	24,911	6,938,794
TRADE.				
Registered:				
Sail—				
Wood	503	232,342	414	143,350
Metal	27	56,113	28	58,451
Total	530	288,455	442	201,801
Steam—				
Wood	267	69,805	286	64,120
Metal	139	521,480	156	538,005
Total	406	591,285	442	602,125
Barges—				
Wood	482	53,387	527	59,037
Metal	23	6,359	23	8,183
Total	505	59,746	550	67,220
Total registered	1,441	939,486	1,434	871,146
Enrolled and licensed:				
Sail—				
Wood	10,986	1,410,695	10,324	1,415,990
Metal	102	199,484	100	196,653
Total	11,088	1,610,179	10,424	1,612,643
Steam—				
Wood	7,640	1,121,155	8,073	1,115,864
Metal	1,454	2,262,847	1,535	2,561,379
Total	9,094	3,384,002	9,608	3,677,243
Canal, wood	717	80,137	731	81,773
Barges—				
Wood	2,586	592,687	2,620	621,058
Metal	80	68,478	94	74,931
Total	2,666	661,165	2,714	695,989
Total enrolled and licensed	23,565	5,735,483	23,477	6,067,648
CONSTRUCTION DURING THE YEAR.				
Geographical distribution.				
Atlantic and Gulf coasts	651	126,607	605	184,532
Porto Rico	2	15	3	30
Pacific coast	197	20,261	207	35,191
Northern lakes	204	265,271	177	244,291
Western rivers	167	[illegible],591	165	7,288
Total construction	1,221	418,745	1,157	471,332
Power and material.				
Sail:				
Wood	225	32,132	143	19,252
Metal	4	3,077	4	5,655
Total	229	35,209	147	24,907

COMPARISON OF MERCHANT MARINE OF 1906 AND 1907—Continued.

Classification.	1906		1907	
	Number.	Gross tons.	Number.	Gross tons.
CONSTRUCTION DURING THE YEAR—continued.				
Power and material—Continued.				
Steam:				
Wood	550	26,613	566	31,889
Metal	100	289,094	108	333,516
Total	650	315,707	674	365,405
Canal, wood	83	8,832	62	6,577
Barges:				
Wood	248	53,798	257	65,059
Metal	11	5,199	17	9,384
Total	259	58,997	274	74,443
Total construction	1,221	418,745	1,157	471,332

ANALYSIS OF THE YEAR'S CONSTRUCTION.

During the past fiscal year 1,157 vessels of 471,332 gross tons were built and documented in the United States, compared with 1,221 vessels of 418,745 gross tons for the previous year. Of this year's total, 333,471 gross tons were built of steel, by far the largest steel construction in our history. The total steel tonnage built in the fiscal year 1898 (only ten years ago) amounted to only 47,792 gross tons.

In last year's report it was anticipated that the total tonnage of all types of vessels for the year just closed would exceed 525,000 gross tons. During the early months of the calendar year 1907, however, labor strikes in the shipyards of the Great Lakes—the center of steel shipbuilding in this country—seriously delayed construction and the anticipated record accordingly was not made good. Since 1855, our greatest shipbuilding year, the output of the past year has been exceeded but once, in 1901, when the total tonnage built aggregated 483,489 gross tons. The salient features of the year's shipbuilding readily appear in the following table of vessels of 1,000 gross tons or upward built and documented, and it will be noted that the tonnage of the 74 vessels named aggregates 70 per cent of the total output of our shipyards:

VESSELS OF 1,000 GROSS TONS AND OVER BUILT IN THE UNITED STATES AND DOCUMENTED DURING THE YEAR ENDED JUNE 30, 1907.

Name.	Gross tons.	Where built.	Name.	Gross tons.	Where built.
SEABOARD.			SEABOARD—cont'd.		
Steel steamers.			*Steel steamers*—Continued.		
Mexican	8,579	San Francisco, Cal.	Ocmulgee	2,667	Quincy, Mass.
Antilles	6,878	Philadelphia, Pa.	Ogeechee	2,667	Do.
Momus	6,878	Do.	Ossabaw	2,667	Do.
Havana	6,391	Do.	Satilla	2,667	Do.
Saratoga	6,391	Do.	Columbia	2,582	Camden, N. J.
President	5,218	Camden, N. J.	Governor Cobb	2,522	Chester, Pa.
W. S. Porter	4,901	Newport News, Va.	Tuscan	2,415	Sparrows Point, Md.
Sun	4,836	Do.	Camden	2,153	Bath, Me.
Massachusetts	4,029	Philadelphia, Pa.	Delaware	1,907	Wilmington, Del.
Yale	3,731	Chester, Pa.	Pawnee	1,907	Do.
New Haven	2,930	Do.			
Katahdin	2,696	Philadelphia, Pa.	Total (32)	87,612	

VESSELS OF 1,000 GROSS TONS AND OVER BUILT IN THE UNITED STATES AND DOCUMENTED DURING THE YEAR ENDED JUNE 30, 1907—Continued.

Name.	Gross tons.	Where built.
SEABOARD—cont'd.		
Wooden steamers.		
Claremont	1,128	Alameda, Cal.
Northland	2,047	Rockland, Me.
Total (2)	3,185	
Steel ferry, river, and bay steamers.		
Hendrick Hudson	2,847	Newburgh, N. Y.
Ithaca	1,462	Newport News, Va.
Babylon	1,310	Wilmington, Del.
Hempstead	1,310	Do.
Raleigh	1,185	Sparrows Point, Md.
Total (5)	8,114	
Wooden schooners.		
Alice M. Lawrence	3,132	Bath, Me.
Fannie Palmer	2,233	Do.
Elisha Atkins	1,259	Do.
Total (3)	6,624	
Rigged steel barges.		
Number twenty-four.	1,566	Camden, N. J.
Number twenty-five.	1,566	Do.
Number twenty-six.	1,566	Do.
Total (3)	4,698	
WESTERN RIVERS.		
Steel ferry steamer.		
Albatross	1,103	Dubuque, Iowa.
GREAT LAKES.		
Steel steamers.		
Le Grand S. De Graff.	7,971	Lorain, Ohio.
William B. Kerr	7,769	Chicago, Ill.
Edward Y. Townsend.	7,438	Superior, Wis.
George F. Baker	7,395	Do.
Thomas F. Cole	7,268	Ecorse, Mich.
Henry Phipps	7,240	West Bay City, Mich.
Daniel J. Morrell	7,239	Do.
Hugh Kennedy	7,064	Lorain, Ohio.
Henry H. Rogers	7,053	Chicago, Ill.
Norman B. Ream	7,053	Do.
Peter A. B. Widener	7,053	Do.
D. R. Hanna	7,023	Lorain, Ohio.
Matthew Andrews	7,014	Cleveland, Ohio.
Ishpeming	6,924	Ecorse, Mich.
J. H. Sheadle	6,924	Do.
Henry A. Hawgood	6,839	Cleveland, Ohio.
J. Q. Riddle	6,832	Lorain, Ohio.
General Garretson	6,765	West Bay City, Mich.
H. P. McIntosh	6,765	Do.
Samuel Mather	6,751	Wyandotte, Mich.
Sheldon Parks	6,611	Superior, Wis.
D. O. Mills	6,598	Ecorse, Mich.
J. H. Bartow	6,316	Wyandotte, Mich.
E. L. Wallace	4,956	Ecorse, Mich.
W. E. Fitzgerald	4,940	Wyandotte, Mich.
Joe S. Morrow	4,895	Lorain, Ohio.
W. G. Pollock	4,872	Cleveland, Ohio.
Joshua W. Rhodes	4,871	Lorain, Ohio.
Charles Hubbard	4,846	Toledo, Ohio.
Sierra	4,846	Do.
James S. Dunham	4,795	West Bay City, Mich.
Smith Thompson	4,786	Toledo, Ohio.
John Mitchell	4,468	St. Clair, Mich.
William B. Davock	4,468	Do.
Ann Arbor No. 4	1,884	Cleveland, Ohio.
Favorite	1,223	Buffalo, N. Y.
Total (36)	217,755	

The following unrigged steel vessels of over 1,000 gross tons were built during the year:

Name.	Gross tons.	Where built.
N. Y. P. & N. R. R. barge No. 2	1,257	Sparrows Point, Md.
N. Y. P. & N. R. R. barge No. 4	1,257	Do.
Total (2)	2,514	

The following summary of the vessels just named and of vessels of over 1,000 gross tons built during the four preceding fiscal years shows the changes in the larger forms of construction for the five-year period:

COMPARISON OF VESSELS OF 1,000 GROSS TONS AND OVER BUILT FROM 1903 TO 1907.

Type.	1903		1904		1905		1906		1907	
	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.	No.	Gross tons.
Seaboard:										
Ocean steel steamers	18	101,471	9	80,374	7	39,996	3	15,344	22	87,612
Steel ferryboats, steam dredges, river and bay steamers	3	3,849	4	8,461	[a]10	14,149	10	16,681	[b]6	9,217
Wooden steamers	3	4,605	3	3,845	....	.....	....	.....	2	3,185
Square-rigged vessels	2	2,638	....	.....	....	.....	....	.....	....	.....
Wooden schooners	[c]20	36,329	[d]15	27,476	14	29,104	4	8,330	3	6,624
Rigged barges	7	10,947	6	15,577	4	6,869	1	1,000	[e]3	4,698
Unrigged vessels	....	.....	3	3,515	2	2,668	....	.....	[e]2	2,514
Total	53	159,839	40	139,248	37	92,786	18	41,355	38	113,850
Great Lakes: Steel steamers	[f]37	131,281	37	136,213	18	101,521	40	232,366	36	217,755
Grand total	[f]90	291,120	77	275,461	55	191,639	58	273,721	74	331,605

[a] Including ferry steamer San Francisco, built of wood.
[b] Including one western river steamer, 1,103 tons.
[c] Including steel schooners Thomas W. Lawson, 5,218 tons, and Kineo, 2,128 tons.
[d] Including steel schooner William L. Douglas, 3,708 tons.
[e] Steel.
[f] Including two schooners of 5,426 tons.

CONSTRUCTION DURING THE CURRENT FISCAL YEAR.

From the present outlook the aggregate tonnage to be built and documented during the current fiscal year will equal the output during the past year, unless strikes cause delay. It will be noted, however, from the details in Appendix E,[a] that contracts made last year are nearing completion; accordingly, a diminution of work in seaboard yards is to be expected next spring, unless more new steamers for the coasting trade shall be contracted for before that time. No steamers exclusively for the foreign trade are now building in American yards.

In accord with the custom of the Bureau for some years past, American builders of steel vessels were requested to make a return showing the steel merchant vessels under contract or under construction at their respective establishments at the beginning of the current fiscal year. The Navy Department, the Revenue-Cutter Service, the Light-House Board, and other branches of the Government engaged in operating vessels for public purposes were requested to furnish a similar statement of vessels building or under contract in private yards for their service on that date. The details of these statements are tabulated in Appendix E. The following is a summary of these statements:

[a] Not printed in this volume. See note on page 308.

NUMBER AND TONNAGE OF STEEL MERCHANT AND GOVERNMENT VESSELS UNDER CONSTRUCTION IN AMERICAN SHIPYARDS ON JULY 1, 1907, WITH CAPITAL INVESTED AND MEN EMPLOYED.

	Capital.	Men.	Merchant ships building, July 1, 1907.		Government vessels building.		Merchant capacity.	
			No.	Tons.	No.	Tons.	No.	Tons.
SEACOAST.								
Merchant and Government.								
Bath Iron Works, Bath, Me	$60,000	950	1	2,150	1	3,750	3	6,000
William Cramp and Sons Ship and Engine Co., Philadelphia, Pa	16,627,185	5,000	4	18,708	3	42,000	(a)	60,000
Fore River Ship and Engine Co., Quincy, Mass	4,800,000	4,000	6	19,537	6	10,140	(a)	(a)
T. S. Marvel Shipbuilding Co., Newburgh, N. Y	300,000	350	6	2,795	1	140	(a)	5,000
Maryland Steel Co., Sparrows Point, Md	2,000,000	1,500	4	b 5,364	5	5,000	4	40,000
Newport News Shipbuilding and Dry Dock Co., Newport News, Va	(a)	5,700	9	24,030	6	32,180	10	5,000
New York Shipbuilding Co., Camden, N. J	10,000,000	4,700	6	16,340	15	42,500	(a)	50,000
The Pusey & Jones Co., Wilmington, Del	710,000	650	1	250	2	1,203	(a)	(a)
Union Iron Works, San Francisco, Cal	(a)	3,500	4	16,504	1	13,680	(a)	(a)
Total	b 34,497,185	26,350	41	105,678	40	150,593	b 17	166,000
Merchant only.								
Burlee Dry Dock Co., Port Richmond, N. Y	300,000	600	4	2,569			16	6,000
Delaware River Iron Shipbuilding and Engine Works, Chester, Pa	(a)	600	1	5,500			5	20,000
John H. Dialogue & Sons, Camden, N. J	(a)	400	7	2,383			(a)	3,000
Harlan & Hollingsworth Corporation, Wilmington, Del	(a)	(a)	8	9,738			(a)	(a)
The Moran Co., Seattle, Wash	(a)	1,000	9	10,731			(a)	20,000
Skinner Shipbuilding and Dry Dock Co., Baltimore, Md	(a)	(a)	4	720			(a)	(a)
Neafie & Levy Ship and Engine Building Co., Philadelphia, Pa	800,000	600	8	2,205			(a)	(a)
Quintard Iron Works, New York, N. Y	250,000	400	2	10,000			(a)	(a)
Total	b 1,350,000	b 3,600	43	43,846			b 21	b 49,000
Government only.								
Dubuque Boat and Boiler Works, Dubuque, Iowa	60,000	100			2	1,400	(a)	1,200
Howard Ship Yards Co., Jeffersonville, Ind	(a)	200			3	(a)	12	7,600
Total	b 60,000	300			5	b 1,400	b 12	8,800
GREAT LAKES AND WESTERN RIVERS.								
American Shipbuilding Co.:								
Cleveland, Ohio	(a)	2,100	3	18,800			3	18,800
Lorain, Ohio	(a)	1,700	9	48,700			9	48,700
West Bay City, Mich	(a)	1,000	6	38,936			5	33,000
Buffalo Dry Dock Co., Buffalo, N. Y	(a)	900	3	5,953			3	12,000
Chicago Shipbuilding Co., Chicago, Ill	(a)	600	2	12,000			4	30,000
Empire Shipbuilding Co., Buffalo, N. Y	(a)	40	1	250			(a)	(a)
Superior Shipbuilding Co., West Superior, Wis	(a)	900	3	18,000			4	20,000
Toledo Shipbuilding Co., Toledo, Ohio	(a)	750	2	11,286			3	15,000
Johnson Bros., Ferrysburg, Mich	100,000	25	1	40			6	800
Detroit Shipbuilding Co., Detroit, Mich	1,428,000	2,000	4	20,709			6	36,000
Great Lakes Engineering Works, Ecorse, Mich	2,500,000	2,200	14	79,275			10	(a)
Manitowoc Dry Dock Co., Manitowoc, Wis	(a)	350	2	(a)			2	(a)
Total	b 4,028,000	12,565	50	b 253,949			b 55	214,300

a Not reporting. b Incomplete.

NUMBER AND TONNAGE OF STEEL MERCHANT AND GOVERNMENT VESSELS UNDER CONSTRUCTION IN AMERICAN SHIPYARDS ON JULY 1, 1907, WITH CAPITAL INVESTED AND MEN EMPLOYED—Continued.

	Capital.	Men.	Merchant ships building, July 1, 1907.		Government vessels building.		Merchant capacity.	
			No.	Tons.	No.	Tons.	No.	Tons.
REPORTING NO VESSELS UNDER CONSTRUCTION.								
Eastern Shipbuilding Co., New London, Conn	(a)	(a)	....	....	....	....	(a)	(a)
W. and A. Fletcher Co., Hoboken, N. J	(a)	(a)	....	....	....	....	(a)	(a)
Crescent Shipyard Corporation, Elizabethport, N. J	(a)	(a)	....	....	....	....	(a)	(a)
Gas Engine and Power Co., Morris Heights, N. Y	(a)	(a)	....	....	....	....	(a)	(a)
Herreshoff Manufacturing Co., Bristol, R. I	(a)	(a)	....	....	....	....	(a)	(a)
George Lawley & Son Corporation, South Boston, Mass	$200,000	300	....	....	....	....	(a)	(a)
Merrill Stevens Engineering Co., Jacksonville, Fla	(a)	(a)	....	....	....	....	(a)	(a)
Port Huron Shipbuilding Co., Port Huron, Mich	(a)	(a)	....	....	....	....	(a)	(a)
Risdon Iron Works, San Francisco, Cal	(a)	(a)	....	....	....	....	(a)	(a)
Riverside Iron Works, Charleston, S. C	(a)	(a)	....	....	....	....	(a)	(a)
John A. Robins Co., Brooklyn, N. Y	(a)	(a)	....	....	....	....	(a)	(a)
Arthur Sewall & Co., Bath, Me	(a)	(a)	....	....	....	....	(a)	(a)
Spedden Shipbuilding Co., Baltimore, Md	(a)	(a)	....	....	....	....	(a)	(a)
United Engineering Works, San Francisco, Cal	(a)	(a)	....	....	....	....	(a)	(a)
Total	b 200,000	b 300	....	....	....	....	(a)	(a)
SUMMARY.								
Seacoast:								
Merchant and Government	34,497,185	26,350	41	105,678	40	150,593	17	166,000
Merchant only	1,350,000	3,600	43	43,846	....	....	21	49,000
Government only	60,000	300	....	....	5	1,400	12	8,800
Great Lakes and western rivers	4,028,000	12,565	50	253,949	....	....	55	214,300
No construction	200,000	300	....	....	....	....	(a)	(a)
Total	b 40,135,185	b 43,115	134	b 403,473	45	b 151,993	b 105	b 438,100

a Not reporting. b Incomplete.

On July 1, 1907, of vessels over 1,000 gross tons, there were 26 steamers, aggregating 113,718 gross tons, building in seaboard yards for the coasting trade, and also 4 steamers of 21,979 gross tons building for the Hawaiian trade under the protection of the coasting laws. At this writing some of these steamers are in operation, and by July 1, 1908, it is probable that the remainder will be completed.

The present and recent conditions of the steel shipbuilding industry of the United States are shown by the following table, giving the number and tonnage of steel vessels under construction or under contract at the dates named:

COMPARISON OF VESSELS BUILDING, 1900–1907.

Date.	Merchant.				Government.		Total.	
	Lake.		Seaboard.					
	Number.	Gross tons.	Number.	Gross tons.	Number.	Displacement (tons).	Number.	Tons.
August 15, 1900	20	70,119	48	207,561	47	113,329	115	391,009
June 15, 1901	26	81,780	63	273,865	71	281,148	160	636,793
July 1, 1902	39	124,537	65	222,949	67	269,890	171	617,376
July 1, 1903	30	109,020	58	146,655	47	334,147	135	589,822
July 1, 1904	a1	400	56	94,588	38	331,435	95	426,423
July 1, 1905	27	104,067	49	86,836	39	308,702	115	499,605
July 1, 1906	33	175,472	78	159,299	29	237,814	140	572,585
July 1, 1907	50	253,949	84	149,524	45	151,993	179	555,466

a During the summer of 1904 contracts for lake shipbuilding were not made until late in the season.

TRADE OF OCEAN STEAMERS.

The following table shows the trade for which ocean steamers of 1,000 gross tons or over built in recent years or now building are designed:

COMPARISON, BY TRADES, OF OCEAN STEAMERS OF 1,000 GROSS TONS AND OVER BUILT, 1902–1907.

Trade.	1902		1903		1904	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons
Foreign:						
Trans-Atlantic	1	12,760	4	36,500	1	7,914
Trans-Pacific (direct)	2	19,212			1	20,714
Trans-Pacific (via Hawaii)	1	11,276	1	11,284	2	27,276
West Indies, Mexico, Venezuela	3	5,353				
Coasting (Hawaii)	2	13,079	2	17,286		
Coasting	12	47,095	11	36,401	3	15,407
Total	21	108,775	18	101,471	7	71,311

Trade.	1905		1906		1907	
	Number.	Gross tons.	Number.	Gross tons.	Number.	Gross tons.
Foreign:						
Trans-Atlantic						
Trans-Pacific (direct)	1	20,714				
Trans-Pacific (via Hawaii)						
West Indies, Mexico, Venezuela			2	12,414	2	12,782
Coasting (Hawaii)					1	8,579
Coasting	6	20,856	1	2,930	19	66,251
Total	7	41,570	3	15,344	22	87,612

None of the trades in the table above are represented in the construction now in progress, except as elsewhere stated—4 vessels of 21,979 gross tons for the coasting trade to Hawaii, and 26 vessels of 113,718 gross tons for the coasting trade of the mainland of the United States.

PROFITS OF SHIPBUILDING.

Census Bulletin 81, issued in July, 1907, contains important statistics concerning the shipbuilding industry of the United States. The figures concerning steel shipbuilding are of special interest, and

dispel any impression that this industry is highly profitable by virtue of the coasting laws, which restrict, except for Government purposes, trade between American ports to vessels built in the United States. The following figures are drawn from the bulletin named:

EXPENDITURES AND PROFITS IN SHIPBUILDING INDUSTRY, 1900 AND 1905.

	1900	1905
Salaries	$1,411,863	$2,544,297
Wages	16,231,311	20,809,908
Miscellaneous expenses	2,642,690	3,767,620
Materials	23,585,549	27,601,824
Total	43,871,413	54,723,649
Value of products	50,367,739	58,433,314
Difference	6,496,326	3,709,665
Capital	59,839,555	101,528,251

The figures for 1905 cover the calendar year 1904, a year of some depression in the industry, particularly on the Great Lakes, where the greater part of our steel tonnage is built. The figures for 1900 cover mainly operations for the calendar year 1899. Obviously the increase in capital is out of proportion to the increase in the value of product, attributable, as already indicated, to the fact that plants were not as fully employed in the census year 1905 as in the census year 1900. The cost of labor, materials, and other expenses entering into cost of construction in 1905 aggregated $54,723,649, and the value of the products was $58,433,314, a difference of only $3,709,665. In other words the finished product exceeded by only 6¾ per cent the cost of labor, materials, etc. Again, this difference is only a trifle over 3½ per cent on the capital invested, $101,528,251. It will be obvious to any business man that a manufacturing industry in this country can not be conducted for any length of time on the narrow margin indicated by either of these figures. Furthermore, the figures are for the entire country, and where the average excess of value over cost is so small evidently some concerns were operated at an actual loss. In the same manner the figures for the census year 1900 show that the difference between cost of labor, materials, etc., and the value of the finished products was $6,496,326. This sum is nearly 15 per cent of the cost of labor, materials, etc., and nearly 11 per cent on the capital invested. The profit indicated is not in excess of that which an American manufacturing industry must expect, if it is to prosper and increase. If the average for the two years be taken, the profits of the industry of steel shipbuilding are manifestly sufficient only to maintain its existence, even under the prohibition of foreign competition by the coasting-trade law.

DECLINE IN SQUARE-RIGGED SHIPPING.

The fourth year has passed since a square-rigged vessel was built in the United States. In the meantime our fleet of this type is steadily decreasing from normal causes. On June 30, 1906, it comprised 276 vessels, of 322,288 gross tons; on June 30, 1907, it comprised 243 vessels, of 284,846 gross tons, a decline of over 10 per

cent in numbers and tonnage. This condition is not peculiar to the United States. The building of such vessels has practically ceased everywhere, though last year a ship of 5,548 gross tons was built in Germany, equipped, however, with auxiliary steam power. Up to the present time the theory has been generally held that training on a square-rigged ship is an essential qualification for service as deck officer on a steamer. This theory must be abandoned, or in a very short time provision must be made for the maintenance of nautical schools on square-rigged ships. Since the annual report of 1904, the Bureau has presented this subject for consideration. In last year's report it was said:

> The method of establishing and supporting such schools can not be worked out by one bureau. It is a question whether they should be under the control of the Navy Department or of the Department of Commerce and Labor. Whether they should be maintained solely by the Federal Government, or by the Federal Government jointly with States, municipalities, or steamship companies is open to debate. Competent officers and contented crews are as necessary to our future as a maritime commercial power as are ships, and the lack of the first named of these can not be supplied on the spur of the moment.

OCEAN-MAIL ACT OF 1891.

The great sea powers of the world are Great Britain, Germany, France, and the United States. In the words "sea power" are included both the navy and the merchant marine of these countries. Japan is making such rapid progress that before long that country should be included in maritime powers of first rank. In September the *Tenyo Maru*, triple-screw turbine steamship, of 13,500 gross tons, 19 knots, planned to be the finest mail steamship on the Pacific, was launched at Nagasaki. All of these countries except the United States have established under their respective national flags ocean-mail lines to the principal ports of the world. These mail lines consist of fast steamships, few of which are under 16 knots speed. This policy has been adopted for several reasons:

1. The maintenance of the ocean mail service of a country is a national obligation which it owes to its people as much as it owes a satisfactory railway mail service.
2. A satisfactory mail service by sea as well as by land is a necessity to the prosecution of commerce.
3. Ever since the Crimean war such fast steamers with their crews have been a necessary adjunct to a nation's sea power in time of war. The means taken to secure this end have varied, but the aim of other nations has been to provide means adequate to the attainment of the end.

By the ocean mail act of 1891 the United States adopted in principle the same policy. As a result certain American ocean mail steamship lines were established soon after, and their usefulness was conclusively shown during our brief war with Spain. Had the war been longer, their value of course would have been even more evident. The act of 1891 was known at the time of its passage to be inadequate in some particulars, principally in respect to the establishment of ocean mail lines to South America.

The bill which passed the House of Representatives at the late session was in form and substance an extension of the act of 1891. In the seventeen years of the operation of that act there have been

changes in Administration and political control of one or both branches of Congress. No one, however, has seriously proposed to repeal that act, and so far as they go its provisions as a rule have met with general approval.

The principal object of the bill of the late session was to establish American mail lines to South America. The desirability of such lines was shown conclusively by the Secretary of State in his speech at the trans-Mississippi convention at Kansas City November 20, 1906. The republics of South America have frequently in the past twenty years expressed their desire for closer relations with the United States. The Monroe doctrine is accepted by nearly every American as a fundamental principle in American foreign policy, binding our country to increase its commercial relations with those republics. One of the most efficient means of increasing such relations is the establishment of superior mail steamship lines to Brazil, Argentina, Chile, Peru, and the other South American Republics. To be successful such lines must be at least equal and should be superior to lines of steamships which connect the ports of South America with the ports of Europe. The bill proposed the establishment of precisely such lines.

As a consequence of the annexation of Hawaii and the acquisition of the Philippines, Guam, and a part of the Samoan group our position on the Pacific Ocean has materially changed within recent years. We are bound to follow a course with reference to these possessions and to oriental trade similar to that which Great Britain adopted in the early days of steam navigation and has since consistently followed. These are the general considerations on which the bill of the late session was framed, and they are important matters of national policy—not small matters of individual gain. Indeed, on the latter score the specific provisions of the bill were drawn with careful consideration of the ocean-mail contracts of foreign lines.

To reassert her supremacy on the North Atlantic, Great Britain, in 1903, advanced to the Cunard Company £2,600,000 at 2¾ per cent interest, and at the same time contracted to pay to the company for twenty years admiralty and mail subsidies sufficient to repay the Government's loan. In effect, the Government paid for the *Lusitania* and *Mauretania* on condition that the Cunard Company would carry the mails, and in the event of war, hold its fleet at the Government's disposal.

Anyone who will study the conditions will agree that anything less than a guaranty of 10 per cent for ten years on the actual capital invested will not accomplish results which our country could contemplate with satisfaction.

At the present time it would be worse than useless to undertake to provide for a mail line of steamers of less than 16 knots to Brazil and Argentina. Steamers of that speed already connect Rio de Janeiro and Buenos Aires with the great ports of maritime Europe, and unless the United States is prepared to furnish facilities that are at least equal we shall hope in vain to turn to this country any part of the trade which for some years has been set in the direction of Europe. Under the act of 1891, a mail steamer of 16 knots is entitled to the rate of $2 per mile outward bound (equivalent to $2.30 per nautical mile). The direct distance from New York to Rio de Janeiro

is 4,778 nautical miles, and to Buenos Aires 5,868 nautical miles, or, in round numbers, allowing for stops at intermediate ports, 5,000 miles to Rio de Janeiro and 6,000 miles to Buenos Aires. Under the act of 1891, accordingly, an American mail steamer from New York to Rio de Janeiro would receive $11,500 per voyage, and four vessels required to maintain uninterruptedly a fortnightly service would receive $299,000, or a trifle less than $75,000 each per year. An ocean-mail steamer with superior passenger accommodations, such as would be required for this service, could not be built in the United States for less than $1,250,000. No figures, however, are needed to show that the present law is inadequate to secure the establishment of mail lines to South America. The fact that it has been in force for so many years without the successful establishment of such a line furnishes the only demonstration needed.

Some years must elapse before 20-knot steamers will be employed by any nation to carry mails to South America. It is submitted that in view of the exceptional relations of the United States to the Republics of that continent the rate of mail pay of $4 per statute mile (equivalent to $4.60 per nautical mile) provided for American mail steamers of 20 knots speed may well be paid to vessels of 16 knots speed or over on routes to Brazil and Argentina. This rate of pay for a fortnightly service from New York to Rio de Janeiro would amount to $600,000 a year, the amount proposed in the bill which passed the House of Representatives at the last session. Four steamers will be required to maintain uninterruptedly a fortnightly service to Brazil, so that the amount mentioned would be equivalent to $150,000 a steamer per annum, or something more than 10 per cent of the probable cost of construction. A steamship line equipped for all emergencies would have a fifth or reserve steamer for this route. The subsidy proposed, $600,000 per annum, would thus be equivalent to $150,000, or approximately 10 per cent of the first cost.

Ocean-mail transportation, of course, is within the province of the Post-Office Department, and suggestion or comment on that branch of public service would be entirely out of place in this report, were it not for the fact that ocean-mail contracts by all the principal maritime nations have been made the means by which such nations have indirectly developed their shipping interests. In so far as this Bureau is required to suggest legislation in the interests of merchant shipping, some consideration of ocean-mail contracts can not be avoided. Such contracts have been the most efficacious means of promoting shipbuilding of the higher types, of developing the merchant marine, and of promoting commerce. Especially have they been the means by which Great Britain has maintained close communication with her distant possessions, so essential to her maritime predominance.

Our relations to the Philippines in some respects are analogous to the relations of England to British India, and if those relations are to be maintained there is a special reason for the establishment of American mail lines to Manila by way of Japan and China. Within a year there has been an abrupt decline in our commercial marine on the Pacific. The three American mail steamships to Australia (*Sonoma*, *Sierra*, and *Ventura*) have been withdrawn and their contract with the Government has been canceled. The withdrawal is not only a blow to our prestige on the Pacific, but to the people of

Hawaii it has been attended with serious inconvenience. These steamers on their voyages between San Francisco and Australia stopped seventeen times a year going and as many times coming at Honolulu, and furnished one of the most frequent and reliable methods of passenger transportation between Hawaii and the Pacific coast. Deprived of these opportunities of travel influential interests in the islands have begun an agitation for the repeal of the coasting law in so far as the passenger trade between Hawaii and the Pacific coast is concerned, unless Congress shall amend the ocean-mail act of 1891, so as to restore an efficient American service to Australia by way of Hawaii. The abandonment of the Oceanic (Spreckels) Line to Australia has, of course, left us without regular American means of communication with our possessions in the Samoan group. Our communications between Puget Sound and Asia have been weakened by the loss of the *Dakota* and the withdrawal of the *Lyra*, *Pleiades*, and *Hyades* to the coasting trade.

The condition of the American merchant marine registered for foreign trade is quite similar to the condition of our Navy before 1880. From natural causes our sailing tonnage engaged in that trade is disappearing rapidly. The decline last year was more marked than usual. On June 30, 1906, there were 503 wooden sail vessels of 232,342 gross tons registered for foreign trade; on June 30, 1907, only 414 such vessels of 143,350 gross tons. It is evident that in a few years at this rate wooden sail vessels will have entirely disappeared from our foreign trade. Some will be cut down into coal barges, others will be permanently laid up, and others will seek the protection of the coasting-trade laws.

Steam tonnage registered for foreign trade is now virtually stationary in amount, and, as no such tonnage is now building, a year hence it will doubtless be below the present figure—602,125 gross tons. Included in these figures are light-draft river steamers on the Yukon. The tonnage of one great foreign steamship corporation exceeds the figure stated, and in efficiency the fleets of ocean steamers of any one of several other foreign companies surpass the entire corresponding fleet under the American flag in foreign trade. At the present time and under existing conditions an extension of the ocean-mail act of 1891 seems to be the most efficient method of not merely promoting the American merchant marine, but even of preventing retrogression. Fortunately such a measure at this time coincides with the general tendency of our growth and is required by considerations other than those which it is within the province of this Bureau to suggest.

NORWEGIAN SUBSIDY.

In previous reports instances of steamship subsidies to promote trade have been given. This year the Norwegian Government has entered into such a contract, the details of which are printed in Appendix M.[a] To promote trade between that country and Cuba, Mexico, and Galveston, Norway has guaranteed a subsidy not to exceed 100,000 kroners ($26,800). While the amount is small, it suffices to provide about $3,000 for each voyage. The exact subsidy, however, is not fixed. If the company meets all operating expenses, including 7 per cent on

[a] Not printed in this volume. See note on page 308.

the first cost of the steamers (for depreciation and extraordinary repairs), and is still able to pay 5 per cent on its capital stock, no subsidy is to be paid. In effect the Norwegian Government to the extent of $26,800 guarantees 5 per cent profit on the capital. In return the Government has the right to regulate freight charges, and the postal authorities may require the mails to be carried free. This latter provision, however, is of little importance, as there are other much more expeditious means of sending mails between Norway, Mexico, and Galveston than by the slow steamers adapted to the commercial ends of the contract. The subsidy, as stated, is small, but the recognition by Norway of the principle of government cooperation is instructive in view of the maritime importance of the country.

TRADE WITH THE PHILIPPINES.

The act approved April 30, 1906, among other provisions, contains the following:

> On and after April eleventh, nineteen hundred and nine, no merchandise except supplies for the Army or Navy shall be transported by sea, under penalty of forfeiture thereof, between ports of the United States and ports or places in the Philippine Archipelago, directly or via a foreign port, or for any part of the voyage, in any other vessel than a vessel of the United States. * * * On and after April eleventh, nineteen hundred and nine, no foreign vessel shall transport passengers between ports of the United States and ports or places in the Philippine Archipelago, either directly or by way of a foreign port, under a penalty of two hundred dollars for each passenger so transported and landed.

Barely eighteen months remain before the act will take effect. Construction of vessels for this trade should be begun at once, unless trade between the United States and the Philippines is to be seriously handicapped or the act quoted is to be amended.

REPORTS OF SHIPPING COMMISSIONERS.

Summaries of the work of shipping commissioners for the past fiscal year are printed in Appendix A.[a] There are 21 shipping commissioners at the principal seaports, with 32 deputies and clerks, in all a force of 53, the same as in 1897. In view of the increased work, the force will be increased this year. The following summary shows the aggregate routine work and salaries of these officers for the past decade.

WORK OF SHIPPING COMMISSIONERS, 1898–1907.

Year.	Seamen shipped, reshipped, and discharged.	Salaries.	Average cost per man.	Year.	Seamen shipped, reshipped, and discharged.	Salaries.	Average cost per man.
1898	116,215	$58,387.57	$0.50	1903	197,918	$60,938.79	$0.30
1899	122,468	53,651.45	.44	1904	201,273	61,548.12	.31
1900	142,632	55,619.13	.39	1905	218,031	59,282.67	.27
1901	160,377	59,379.84	.37	1906	227,392	60,595.23	.26
1902	176,836	58,988.36	.33	1907	259,570	61,716.60	.24

During the year 30 collectors of customs, acting as shipping commissioners, have shipped 1,776 seamen and discharged 1,695.

[a] Not printed in this volume. See note on page 308.

NATIONALITY OF CREWS.

The men shipped and reshipped (including repeated voyages) by shipping commissioners on vessels of the United States during the past five fiscal years were classed by nationality as follows:

Nationality.	1903	1904	1905	1906	1907
Americans (born)	36,761	34,125	37,098	37,676	44,095
Americans (naturalized)	22,737	21,425	22,511	23,456	25,737
British	14,483	13,868	13,790	14,517	16,606
Chinese	766	187	432	286	267
Japanese	615	446	537	586	614
Filipinos	126	36	57	59	52
Germans	5,280	4,087	4,178	4,368	5,276
Norwegians	7,615	6,956	6,019	6,477	6,810
Swedes	6,268	5,498	4,223	4,704	4,587
Danes	1,571	1,438	1,509	1,547	1,895
Russians	3,839	3,237	2,810	2,863	3,083
Austrians	1,181	914	1,145	1,267	1,160
French	629	584	562	530	638
Spanish	7,655	8,647	11,738	13,454	16,371
Italian	2,644	2,979	4,593	4,871	5,403
Portuguese	3,785	3,475	3,827	3,988	3,332
Others	4,702	4,923	5,314	5,639	6,910
Unknown	128	132	292	407	563
Total	120,785	112,957	120,635	126,745	143,399
Per cent Americans	49.2	49.2	49.4	48.2	48.7

On American trans-Atlantic steamers a considerable number of aliens are shipped in European ports for the round voyage, and on trans-Pacific steamers a considerable number of Chinese are shipped in Asiatic ports for the round voyage. All of these are shipped before American consuls, and are not included in the table above. They would considerably increase the proportion of alien seamen on American merchant vessels. On the other hand, the number of Americans on small vessels in the coasting trade who are not shipped before shipping commissioners doubtless exceeds the number of aliens. It is not probable that the number of American seamen can be materially increased by legislation.

On British merchant vessels the number of British seamen has remained stationary for twenty years, and Asiatics and other aliens have supplied the increased crews required to man increased British merchant tonnage. In its naval reserve the British Government has provided a force of British seamen available for service in time of war. The need of a similar American naval reserve is sufficiently obvious without argument.

DESERTION OF SEAMEN.

A satisfactory system of securing returns of seamen who desert from American vessels has not as yet been devised in the coasting trade. Indeed, the offense of desertion from American vessels in American ports was virtually abolished by the act of December 21, 1898. Reports of shipping commissioners for the past fiscal year show that of 143,399 men who signed articles to ship on American vessels, only 4,007, or 2.79 per cent, failed to join their ships. The figures for the past six years are as follows:

FAILURES TO JOIN.

Year.	Shipped and reshipped.	Failed to join.	Per cent.
1902	108,554	4,278	3.94
1903	120,785	5,187	4.29
1904	112,957	3,857	3.41
1905	120,782	3,273	2.71
1906	126,745	3,894	3.07
1907	143,399	4,007	2.79

That of late years less than 3 out of every 100 seamen have failed to report for duty after contracting to do so is a satisfactory showing. It is mainly attributable to the increasing use of steam. Steam vessels offer a steadiness of employment which sail vessels can not, and, of course, the inclination to abandon a permanent job is less than to abandon temporary work.

Reports from American consuls, so far as received, show that during the past year 1,319 American steamers (counting repeated voyages) cleared from foreign ports. The aggregate crews of these vessels numbered 109,365 men, of whom only 711 deserted. Sail vessels numbered 527 (counting repeated voyages), manned by 4,409 men, of whom 129 deserted.

ALLOTMENT NOTES.

The number of allotment notes has steadily decreased since the passage of the act of December 21, 1898. Last year less than half as many allotment notes were issued as during the year 1902, as shown by the following comparative statement:

ALLOTMENT NOTES ISSUED, 1902–1907.

Year.	Square-rigged.	All others.	Relatives.	Total.
1902	2,523	1,691	240	4,454
1903	2,005	1,870	284	4,159
1904	1,966	1,513	287	3,766
1905	1,595	919	304	2,818
1906	1,492	421	309	2,222
1907	1,323	490	239	2,052

Under the act cited the Bureau can practically abolish the system at any time. The act, however, necessarily applies to foreign as well as American vessels. In the case of foreign vessels the enforcement of the allotment law rests with the consuls of other maritime nations, and a reasonable courtesy prescribes care in attempting to change practices which they sanction in their own ports. So far as American vessels are concerned, complaints against the allotment law have virtually ceased.

TONNAGE TAXES.

Tonnage taxes during the past fiscal year amounted to $1,044,781.13, an increase of $77,458.65 over the previous fiscal

year. Details concerning these taxes are printed in Appendix D.[a] It will be noted that the amount for the past year is the largest collected during any year since the method of levying the taxes was changed in 1884, and that the collections are double those of 1895. The increase, of course, is due to the increase in the volume of shipping required to conduct our foreign trade. Of the total amount collected, American vessels paid $80,064.19, due to their trifling share in our foreign trade. British vessels paid $611,049.51. Since July 1, 1906, the revenue derived from this source has been covered into the general funds of the Treasury. As has been stated in previous reports, our rates of tonnage taxes are moderate by comparison with corresponding taxes imposed in foreign ports, and by the method of imposition (on the net tonnage of the ship devoted to the transportation of passengers and cargo) they are equitably distributed and constitute a very small burden on commerce.

DISCRIMINATION AGAINST SAILING VESSELS IN THE COASTING TRADE.

The passage of a bill exempting from compulsory pilotage sail vessels in the coasting trade when under the direction of a pilot licensed by Federal authority is again recommended. Senate bill 30 and House bill 5281 of the last session will accomplish the result desired. To the reports of committees in favor of the measure, to facts elicited in extended hearings, and to statements in its former reports in favor of this bill the Bureau can add little. The field of profitable employment for the American sailing vessel becomes more and more restricted every year to our own coasting trade by causes beyond legislative control.

In a large section of that trade—the ports from Virginia to Texas, inclusive—the sail vessel is met by a discrimination, caused by the joint operation of State laws and an act of Congress. The laws of the States in question prescribe that vessels in the coasting trade must employ a pilot licensed under State law. Congress has provided that a steamer need not employ such a State pilot, provided her pilot is licensed by Federal authority to navigate a vessel in the waters of the State. Consequently the sail vessel is required to pay for a State pilot, whether actually employed or not, while the steamer does not have to pay for the State pilot unless actually employed. Briefly, the bill under consideration proposes to put the sail vessel in respect of payment of a State pilot on the same plane as the steamer. Local pilotage charges vary, but in every instance they suffice to handicap the sail vessel, already on unequal terms in competition with the steamer.

The weaker sail interest has to carry a burden from which the more powerful steam interest has been relieved. The present situation was created by the act of February 28, 1871, and naturally the appeal for remedy is addressed to Congress rather than to the State legislatures. The need of maintaining State pilotage systems in the highest state of efficiency is not disputed by anyone. If the foreign trade of a port, for which primarily such systems are required, will not suffice for the purpose, then the coasting trade, steam and sail alike, may properly be asked to contribute. It is not probable that Congress

[a] Not printed in this volume. See note on page 308.

would be disposed to subject coasting steamers to State pilotage charges from which for thirty-five years they have been exempt.

Equality thus can be restored only by giving sail vessels a similar exemption. If further support for State pilotage systems be needed, State legislatures may revise pilotage rates on vessels in foreign trade. In most instances such revision will not be necessary. The industrial development of the South and the liberal appropriations of Congress for the improvement of southern harbors have been followed by a large increase in the foreign trade of southern ports favorably placed for the prosecution of that trade, and the dangers of navigation have been reduced.

Steam pilot boats are now in general use, and it is not the practice of pilots to cruise far at sea as formerly. The efficiency of each pilot has thus been greatly enhanced and the perils of his calling have been reduced. The passage of the bill will contribute to safe navigation by increasing the number of officers whose competency is certified by a Federal examination.

RULES FOR PREVENTING COLLISIONS.

By the act approved January 19, 1907, Congress provided that on and after January 1, 1908, the proposed article 9, providing for lights and signals on fishing vessels, shall apply to vessels of the United States. The revision of the international rules for preventing collisions at sea was the most important work undertaken by the International Marine Conference held at Washington in 1889, and the act mentioned brings to successful completion that work. Changes in these international rules should, of course, be made only upon consultation with other maritime nations, and so far as this Bureau is advised only one change is now under consideration. The American delegates to the conference of 1889 strongly urged the general adoption of the system of range lights on steam vessels in general use in the United States and made obligatory under our inland rules. The conference, however, was not prepared to take this step, but did recommend the optional use of these lights. The Government of Norway is now recommending that the use of range lights on steam vessels be made obligatory under the international rules, and through the usual channels has been advised that the United States is prepared to support again the proposition.

By the act of June 7, 1897, the inland rules of the United States were brought into close conformity with the international rules. Changes in these rules should, of course, be made only after the most careful consideration and consultation with all interests concerned. In view of the very great increase in the past few years in the number of motor vessels, some changes in the inland rules are desirable. At present these vessels are in the main subject to the same requirements as steam vessels. For obvious mechanical reasons, it is not feasible for them to carry range lights. The Bureau is in consultation with interests concerned with a view to submitting later a recommendation for legislation upon this subject.

APPLICATIONS FOR MITIGATION OR REMISSION OF FINES, PENALTIES, AND FORFEITURES.

Applications for the mitigation or remission by the Secretary of Commerce and Labor of fines, penalties, and forfeitures under the navigation laws are considered in the first instance by the Bureau of Navigation. During the past year 684 such applications were considered, including over 50 cases at San Francisco, properly chargeable to the previous fiscal year, when the preparation of the proper papers was delayed by the destruction of records in office buildings at San Francisco. Following is a summary of applications made to the Department, classed according to the statutes violated and according to the ports from which violations were reported by collectors of customs, together with a summary, under the totals, of applications during the three previous fiscal years.

APPLICATIONS FOR REMISSION OR MITIGATION OF PENALTIES.

Port.	Total.	Steamboat (4399–4500, R. S.).	Surrendered license (4325–4326, R. S.).	Rules of road (June 7, 1897), inland lakes and St. Marys River.	Bills of health (Feb. 15, 1893).	Anchorage rules (May 16, 1888).	Passenger act (Aug. 7, 1882).	Inspection of enrollment and license (4336, R. S.).	Master's report on arrival (2774, R. S.).	Name on vessel (4178, R. S.).	Change of master (4335, R. S.).	Unlading (2872, R. S.).	Miscellaneous.
Albany	1									1			
Annapolis	4									4			
Astoria	5				2				1				2
Baltimore	26	15			3				1	3	3		1
Barnstable	3	1									1		1
Beaufort, S. C	2		2										
Boston	7		2	1	2		1		1				
Bridgeport	5	3								2			
Buffalo	5	2	1	2									
Burlington	3	3											
Charleston	19		2	5				1		7			4
Chattanooga	1	1											
Chicago	7	4		1						2			
Cleveland	10	2		8									
Crisfield	4		1	1						1	1		
Detroit	28	14	8	6									
Duluth	16	3		9					1		2		1
Edgartown	1									1			
Elizabeth City	1										1		
Erie	1			1									
Eureka	1	1											
Fernandina	16	11			5								
Galveston	15	6		1				3		1	1		3
Gloucester	3			1							1		1
Grand Haven	9	7		1						1			
Gulfport	11			9	1						1		
Jacksonville	5			1	2								2
Juneau	22	12	7	1					2				
Key West	12		4	7									1
Los Angeles	4		2						2				
Louisville	2	2											
Machias	1	1											
Marquette	6	1	1	4									
Milwaukee	4	4											
Mobile	12		9		1				1				1
Memphis	3	3											
Newark	2									1	1		
New Haven	3					3							
New London	1									1			
New Orleans	21	2		1	7		1		8				2
Newport News	9	1	3	2	2								1
New York	118	26	31	5	3	13	15			12	5	5	3
Norfolk	7	4	1	1									1
Ogdensburg	3		2								1		
Paducah	3	2	1										
Pensacola	1			1									
Perth Amboy	3										1		2

APPLICATIONS FOR REMISSION OR MITIGATION OF PENALTIES—Continued.

Port.	Total.	Steamboat (4399–4500, R. S.).	Surrendered license (4325–4326, R. S.).	Rules of road (June 7, 1897), inland lakes and St. Marys River.	Bills of health (Feb. 15, 1893).	Anchorage rules (May 16, 1888).	Passenger act (Aug. 2, 1882).	Inspection of enrollment and license (4336, R. S.).	Master's report on arrival (2774, R. S.).	Name on vessel (4178, R. S.).	Change of master (4335, R. S.).	Unlading (2872, R. S.).	Miscellaneous.
Philadelphia	15	11		1	2	1							
Plattsburg	1	1											
Port Arthur	6	2	2							2			
Port Huron	5	1		2									2
Portland, Me	3	2			1								
Port Townsend	87	38	7	5	1		8	2	3	7	2		14
Providence	9	7									1		1
Rochester	1			1									
Rockland	1									1			
Salem	1										1		
San Diego	1		1										
Sandusky	7		1	1		1			2	2			
San Juan	3						1						2
San Francisco	72	9			4		35	2			4		18
Savannah	1							1					
Somers Point	1									1			
Tampa	20	6		13					1				
Toledo	2	1					1						
Waldoboro	2									2			
Total:													
1907 (66 ports)	684	209	88	92	36	18	62	9	23	52	27	5	63
1906 (77 ports)	670	194	114	130	41	13	27	10	6	49	5	9	72
1905 (63 ports)	524	142	99	53	42	13	21	26	7	20	11	28	62
1904 (66 ports)	706	184	101	93	48	49	16	29	12	24	19	(a)	131

a Included under "Miscellaneous" in 1904 report.

The number of violations of the navigation laws and the number of applications for remission of penalties must not be confused. The former can not be determined, for many violations escape detection, the number depending on the vigilance of collectors of customs, revenue-cutter officers, local inspectors of hulls and boilers, and other Federal officers along the country's water front. In round numbers there are 25,000 American vessels, and fully 100 different provisions of law apply to a greater or less extent to each of them; also many provisions of our laws apply to the large number of foreign vessels in trade with this country. A record of only 684 violations of the navigation laws, if it could be accepted as a complete statement of facts, would show a satisfactory observance of Federal statutes. The nature of reports, however, shows from time to time that these returns are more incomplete than need be. Constant efforts are made to secure a closer observance of law. For plain reasons many violations of the navigation laws are committed on the water and can be reported and prevented only if the officers directly charged with enforcing these laws have the opportunity to proceed from point to point by water. Congress and the Treasury Department have provided launches by which collectors of customs may move about the harbors of their districts in enforcing the customs laws. Negotiations with the Treasury Department have been begun to secure the use of the same launches by collectors in the enforcement of the navigation laws as well. If legislation shall be necessary to accomplish this end, the Bureau will later submit a special request therefor.

AMENDMENT TO SECTION 5294, REVISED STATUTES.

The act creating the Department of Commerce and Labor in section 10 transferred from the Secretary of the Treasury to the Secretary of Commerce and Labor, among other things, all duties, power, authority, and jurisdiction conferred by acts of Congress "relating to the remission or refund of fines, penalties, forfeitures, exactions, or charges incurred for violating any provision of law relating to vessels or seamen or to informer's shares of such fines." Some of the questions which have arisen in the administration of this law would be obviated if section 5294 of the Revised Statutes, as amended, were amended by the insertion in the first line of the words "Commerce and Labor" in lieu of the words "the Treasury," and also by the insertion in the third line, after the word "laws," of the words "imposing them on vessels or their masters, or." As proposed to be amended section 5294 would then read:

SEC. 5294. The Secretary of Commerce and Labor may, upon application therefor, remit or mitigate any fine, penalty, or forfeiture provided for in laws imposing them on vessels or their masters, or relating to vessels, or discontinue any prosecution to recover penalties or relating to forfeitures denounced in such laws, excepting the penalty of imprisonment or of removal from office, upon such terms as he, in his discretion, shall think proper; and all rights granted to informers by such laws shall be held subject to the Secretary's powers of remission, except in cases where the claims of any informer to the share of any penalty shall have been determined by a court of competent jurisdiction prior to the application for the remission of the penalty or forfeiture; and the Secretary shall have authority to ascertain the facts upon all such applications in such manner and under such regulations as he may deem proper.

For ready reference, section 10 of the act of February 14, 1903, cited above, is reproduced here:

All duties performed and all power and authority now possessed or exercised by the head of any executive department in and over any bureau, office, officer, board, branch, or division of the public service by this act transferred to the Department of Commerce and Labor, or any business arising therefrom or pertaining thereto, or in relation to the duties performed by and authority conferred by law upon such bureau, officer, office, board, branch or division of the public service, whether of an appellate or revisory character or otherwise, shall hereafter be vested in and exercised by the head of the said Department of Commerce and Labor.

All duties, power, authority and jurisdiction, whether supervisory, appellate or otherwise, now imposed or conferred upon the Secretary of the Treasury by acts of Congress relating to merchant vessels or yachts, their measurement, numbers, names, registers, enrollments, licenses, commissions, records, mortgages, bills of sale, transfers, entry, clearance, movements and transportation of their cargoes and passengers, owners, officers, seamen, passengers, fees, inspection, equipment for the better security of life, and by acts of Congress relating to tonnage tax, boilers on steam vessels, the carrying of inflammable, explosive or dangerous cargo on vessels, the use of petroleum or other similar substances to produce motive power and relating to the remission or refund of fines, penalties, forfeitures, exactions or charges incurred for violating any provision of law relating to vessels or seamen or to informer's shares of such fines, and by acts of Congress relating to the Commissioner and Bureau of Navigation, Shipping Commissioners, their officers and employees, Steamboat-Inspection Service and any of the officials thereof, shall be and hereby are transferred to and imposed and conferred upon the Secretary of Commerce and Labor from and after the time of the transfer of the Bureau of Navigation, the Shipping Commissioners and the Steamboat Inspection Service to the Department of Commerce and Labor, and shall not thereafter be imposed upon or exercised by the Secretary of the Treasury. And all acts or parts of acts inconsistent with this act are, so far as inconsistent, hereby repealed.

TRANSPORTATION COASTWISE OF NAVY COAL.

Late in June new questions in the interpretation of the navigation laws arose in connection with the transportation of coal from the Atlantic to the Pacific coast for the use of the battle ships assigned to that voyage. Section 4347 of the Revised Statutes, as amended February 17, 1898, provides:

> No merchandise shall be transported by water under penalty of forfeiture thereof from one port of the United States to another port of the United States, either directly or via a foreign port, or for any part of the voyage, in any other vessel than a vessel of the United States.

Section 4219 of the Revised Statutes provides:

> Upon every vessel not of the United States, which shall be entered in one district from another district, having on board goods, wares, or merchandise taken in one district to be delivered in another district, duties shall be paid at the rate of 50 cents per ton.

In addition to this tonnage tax of 50 cents, section 4225 provides light money of 50 cents per ton, making in all a tax of $1 per net ton.

The questions whether the prohibition of transportation and forfeiture of cargo and the imposition of $1 per net ton on the ship applied to foreign vessels engaged in transporting coal for the use of the Navy from the Atlantic to Pacific coast ports of the United States were submitted to the Attorney-General, and action was taken in accord with his opinions, which are printed in Appendix M.[a]

BRUSSELS CONFERENCE.

Through the customary channels the Bureau has been advised that the Belgian Government proposes another session of the Brussels Conference to consider the draft treaties relating to salvage and collisions at sea. It is also proposed to consider the matter of uniformity of law in limiting the liability of shipowners. For manifest reasons the United States should be represented at the proposed conference, which will probably be held early next year.

Respectfully,

EUGENE TYLER CHAMBERLAIN,
Commissioner.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

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[a] Not printed in this volume. See note on page 308.

NOTE.—The report of the Commissioner of Navigation, as separately published, contains also the following appendixes and statistical tables:

APPENDIXES.

(A) Reports of shipping commissioners—(1) Shipments, discharges, and expenditures; (2) Shipments and reshipments; (3) Discharges; (4) Nationality of seamen; (5) Failures to join; (6) Men shipped to be discharged in foreign ports; (7) Allotments of wages; (8) Seamen shipped and discharged by collectors.

(B) Wages of seamen—(1) Average monthly wages paid in the American merchant marine for the year ended June 30, 1907; (2) Average monthly wages paid to able seamen on American vessels, 1895 to 1907; (3) Average monthly wages paid to first mates on American vessels, 1895 to 1907; (4) Average monthly wages paid to firemen and first engineers on American steam vessels, 1895 to 1907; (5) Predominant wages of able seamen on British vessels, 1870 to 1906; (6) Predominant wages of firemen and trimmers on British steam vessels, 1895 to 1906; (7) Maximum, minimum, and predominant wages paid to mates and boatswains on British vessels in 1906; (8) Maximum, minimum, and predominant wages paid to engineers and carpenters on British steam vessels in 1906; (9) Average monthly wages of mates, petty officers, engineers, and firemen on British vessels in the foreign trade, 1870 to 1906.

(C) Consular reports of seamen shipped, discharged, and deserted from American vessels in foreign ports during the fiscal year ended June 30, 1907.

(D) Tonnage taxes—(1) Law, and collections for the past eleven years; (2) Collections, by nationality of vessels, for the fiscal year ended June 30, 1907; (3) Collections at various ports during the fiscal year ended June 30, 1907.

(E) Steel shipbuilding of the United States—(1) Steel steam vessels built in the United States during the past ten years; (2) Steel vessels building or contracted for in the United States on July 1, 1907; (3) Price of steel ship plates in the United States and Great Britain.

(F) The world's tonnage, motive power, and materials of construction—(1) Report of British Board of Trade; (2) Report of Bureau Veritas; (3) Report of Lloyd's Register; (4) Motive power and materials of construction of the world's merchant marine (Lloyd's); (5) Tonnage tables, 1890–1907, with potential tonnage (Bureau Veritas); (6) Vessels of over 100 tons built during nine recent years; (7) Summary of the world's shipbuilding for 1906 (Lloyd's); (8) Construction in progress September 30, 1906 and 1907 (Lloyd's); (9) Vessels lost or broken up during 1906 (Lloyd's).

(G) The world's large and fast ocean steamships—Classification, by owners, flag, and speed.

(H) Progress of foreign shipping—(1) Shipping of British Empire, with number of men employed; (2) Steam shipping of British Empire; (3) Vessels built in British Empire; (4) Steam vessels built in British Empire; (5) Tonnage built in United Kingdom for British and colonial register and for foreigners; (6) Vessels purchased from foreigners and registered in United Kingdom; (7) Vessels belonging in United Kingdom sold to foreigners; (8) Vessels of United Kingdom stricken from register for causes other than sale; (9) Trade of shipping of United Kingdom and men employed; (10) Entries and clearances of vessels in foreign trade of United Kingdom, with British percentage of total; (11) Progress of German shipping; (12) Progress of Japanese shipping.

(I) British shipping policy—(1) British ocean-mail payments for 1906–7; (2) Foreign and colonial packet service, 1840–41 to 1906–7; (3) British reserve merchant cruisers; (4) British naval reserve appropriations.

(J) Registered steam vessels of the United States on June 30, 1907.

(K) Statistics of square-rigged American vessels.

(L) Statistics relating to steerage passengers arriving at New York during the year ended June 30, 1907.

(M) Miscellaneous—(1) Foreign carrying trade of the United States, 1821–1907; (2) Tonnage of American and foreign vessels in the foreign trade of the United States, 1821–1907; (3) Comparative speed of mail steamers; (4) Norwegian subsidy; (5) Transportation coastwise of navy coal.

STATISTICAL TABLES.

(1) Registered, enrolled, and licensed vessels, by States and customs districts, June 30, 1907.
(2) Summary of Table 1, by States.
(3) Registered, enrolled, and licensed steam vessels, by States and customs districts, June 30, 1907.
(4) Registered, enrolled, and licensed metal vessels, by States and customs districts, June 30, 1907.
(5) Registered, enrolled, and licensed steam metal vessels, by States and customs districts, June 30, 1907.
(6) Metal sail and steam vessels and barges, by States and customs districts, June 30, 1907.
(7) Total registered, enrolled, and licensed sail and steam vessels and canal boats and barges (wood and metal), June 30, 1907.
(8) Balance sheet showing increase and decrease of registered, enrolled, and licensed vessels for the fiscal year ended June 30, 1907.
(9) Balance sheet showing class of increase and decrease of all vessels for the fiscal year ended June 30, 1907.
(10) Registered, enrolled, and licensed sail and steam vessels, by years, from 1789.
(10*a*) Documented canal boats and barges, by years, from 1868.
(10*b*) Number and gross tonnage of sail vessels, steam vessels, canal boats, and barges on the northern lakes from 1868.
(11) Sail and steam vessels, canal boats, and barges, by States and customs districts, June 30, 1907.
(12) Summary of Table 11, by States.
(13) Classifications of sail and steam vessels, by size and geographical distribution, June 30, 1907.
(14) Vessels in cod and mackerel fisheries, by States and customs districts, June 30, 1907.
(15) Vessels in whale fisheries, by States and customs districts, June 30, 1907.
(16) Employment of vessels, June 30, 1907.
(17) Vessels in foreign, coasting, and fishing trades, by years, from 1789.
(18) Sail and steam vessels, canal boats, and barges, by States and customs districts, built in year ended June 30, 1907.
(19) Rig of sailing vessels built in year ended June 30, 1907.
(20) River, lake, and ocean steamers built in year ended June 30, 1907.
(21) Steel vessels (sail, steam, barges) built in year ended June 30, 1907.
(22) Class, number, and gross tonnage of vessels built in the United States and documented, 1797 to 1907.
(23) Tonnage built annually in New England, on the seaboard, western rivers, and Great Lakes, by years, from 1857.
(24) Number and gross tonnage of metal vessels built in the United States and documented, 1838 to 1907.
(25) Tonnage built, admitted to registry, lost, abandoned, sold to aliens, etc., since 1812.
(26) Yachts documented June 30, 1907.
(27) Yachts, metal, documented June 30, 1907.
(28) Documented yachts built in year ended June 30, 1907.
(29) Documented metal yachts built in year ended June 30, 1907.
(30) Yachts lost, abandoned, sold to aliens, etc., during year ended June 30, 1907.

REPORT

OF THE

SUPERVISING INSPECTOR-GENERAL, STEAMBOAT-INSPECTION SERVICE

REPORT

OF THE

SUPERVISING INSPECTOR-GENERAL, STEAMBOAT-INSPECTION SERVICE

REPORT

OF THE

SUPERVISING INSPECTOR-GENERAL,

STEAMBOAT-INSPECTION SERVICE.

DEPARTMENT OF COMMERCE AND LABOR,
STEAMBOAT-INSPECTION SERVICE,
Washington, November 18, 1907.

SIR: I have the honor to submit to you the following report of the Steamboat-Inspection Service for the fiscal year ended June 30, 1907, as required by section 4403, Revised Statutes, and under Department regulations relating thereto.

PERSONNEL.

The personnel of this Service at the close of the fiscal year consisted of 241 officers and clerks and 1 messenger, as follows: At Washington, the Supervising Inspector-General, a chief clerk, who is Acting Supervising Inspector-General in the absence of that officer, 5 clerks, and 1 messenger; and the Service at large, consisting of 10 supervising inspectors, 44 local inspectors of hulls, 44 local inspectors of boilers, 38 assistant inspectors of hulls, 38 assistant inspectors of boilers, and 60 clerks, including 1 clerk to the supervising inspector at New York. During the year 1 supervising inspector (at St. Louis, Mo.), 3 local inspectors of boilers, 1 local inspector of hulls, 3 assistant inspectors of hulls, 3 assistant inspectors of boilers, and 16 clerks to local inspectors were appointed; 1 local inspector of boilers and 5 clerks resigned; 1 local inspector of hulls and 1 assistant inspector of hulls died, and 1 local inspector of boilers was dismissed.

Additions to the official force of the Service during the year were: In the office of the Supervising Inspector-General, 1 file clerk, and to the Service at large, 1 assistant inspector of hulls and 1 assistant inspector of boilers at Philadelphia, Pa.; 1 assistant inspector of hulls and 1 assistant inspector of boilers at Norfolk, Va., and 1 assistant inspector of hulls and 1 assistant inspector of boilers at Seattle, Wash. Eleven clerks to boards of local inspectors were added and assigned to ports that had never had clerks.

SUMMARY OF OFFICE WORK.

The following is a partial summary of the work in the office of the Supervising Inspector-General during the fiscal year ended June 30, 1907:

Acknowledgments received of documents mailed	850
Reports of excursion permits issued	1,230
Letters prepared for Secretary's signature	427
Permits to use oil as fuel on steamers	126
Temporary permits to use coil boilers	2
Annual reports of lifeboat and life-raft equipment of vessels of over 100 tons	44
Semimonthly reports of vessels visited by supervising inspectors	240
Miscellaneous accounts examined and approved	765
Index (card system) correspondence (new numbers)	6,716
Estimated number of letters received, answered, and actually filed	26,864
Personal expense accounts examined and approved	1,739
Weekly reports of inspectors examined and checked	2,318
Quarterly statements of customs officers and inspectors examined, checked, and recorded	761
Reports of casualties and violations of law recorded and filed	1,395
Statements of public property charged to service received, examined, and checked	110
Reports of tests of material at mills and affidavits of boiler makers received, recorded, and filed	1,506

The above summary of the work of this office shows a decided increase over that of the previous fiscal year, notably increases of 280 in the number of miscellaneous and personal expense accounts examined and approved, at least 25 per cent in the correspondence, and about 50 per cent in the number of test reports of inspection of materials.

EXPENDITURES.

Following is a detailed account of the expenditures for the fiscal year ended June 30, 1907:

Salaries, Supervising Inspector-General, supervising inspectors, local and assistant inspectors, clerks, and messenger, paid from the funds in the Treasury not otherwise appropriated, acts approved June 19, 1886, and April 4, 1888, as amended by acts approved March 3, 1905, and act approved April 9, 1906 (appointments authorized by sections 4402, 4404, and 4414, Revised Statutes):	
Office of Supervising Inspector-General at Washington, D. C	$12,940.00
Service at large	389,656.27
Total	402,596.27
Traveling expenses (actual and mileage)	71,351.97
Rents, offices	12,975.18
Telephone rents, telegrams, and postage	2,370.88
Stationery, supplies, and transportation of same	2,436.94
Witnesses' fees in cases of investigations	948.65
Notary fees, inspection certificates, and expense accounts	834.99
Furniture and repairs to furniture	733.73
Instruments and repairs to instruments	632.14
Typewriting machines, repairs and supplies	591.60
Ice, fuel, gas, electric lights, and water rents	329.81
Removing manifolds from yacht *Colonia*, preparing same for chemical analysis, and testing	255.00
Clerk to Board of Supervising Inspectors, annual meeting, 1907	155.00
Janitors to inspectors' offices	100.00
Stenographers in cases of investigation	74.95
Towels, laundry, and soap	66.50
Moving offices, Boston, Mass., and Grand Haven, Mich	48.75

Cleaning carpets and rugs, etc., inspectors' offices	$45.00
Translation and interpretation foreign languages in cases of investigation	40.00
Official railway guides and marine publications	36.75
Care clocks in New York office	21.00
Post-office box rent	15.12
Total traveling and miscellaneous expenses	94,063.96
Salaries as noted above	402,596.27
Total expenditures for year ended June 30, 1907	496,660.23
Total expenditures for year ended June 30, 1906	450,242.76
Increase, 1907	46,417.47
Salaries, 1907	402,596.27
Salaries, 1906	371,488.77
Increase, 1907	31,107.50
Contingent expenses, 1907	94,063.96
Contingent expenses, 1906	78,753.99
Increase, 1907	15,309.97
Traveling expenses, actual and mileage, 1907	71,351.97
Traveling expenses, actual and mileage, 1906	59,110.19
Increase, 1907	12,241.78
Rents, 1907	12,975.18
Rents, 1906	10,141.62
Increase, 1907	2,833.56

NUMBER, CLASS, AND TONNAGE OF VESSELS INSPECTED.

There is submitted herewith a tabulated statement showing the number, class, and tonnage of vessels regularly inspected by this Service and granted certificates.

CERTIFICATES OF INSPECTION ISSUED TO VESSELS PROPELLED BY STEAM, SAIL, OR OTHER MOTORS DURING THE FISCAL YEAR ENDED JUNE 30, 1907.

Supervising district.	Local district.	Foreign steamers.		Domestic steamers.		Motor vessels.		Total.		Sail vessels and barges.		Grand total.	
		Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.
First district	San Francisco, Cal	14	60,288	313	303,606	40	4,079	367	368,033	4	3,597	371	371,630
	Portland, Oreg			168	37,999	5	285	173	38,284			173	38,284
	Seattle, Wash	26	151,328	300	132,005	4	200	330	283,533			330	283,533
	Juneau, Alaska	1	75	100	4,049	1	25	102	4,149			102	4,149
	St. Michael, Alaska	2	8,170	80	35,099	3	267	85	43,536	1	1,062	86	a 44,598
Second district	New York, N. Y	200	1,500,815	1,260	710,593	20	683	1,480	2,212,091	15	6,626	1,495	2,218,717
	Albany, N. Y	3	7,002	192	48,779			195	55,781	1	248	196	b 56,029
	Boston, Mass	29	240,146	255	89,494	1	41	285	329,681	2	909	287	330,590
	Providence, R. I			182	81,605	5	140	187	81,745			187	81,745
	New London, Conn			96	35,203	7	811	103	36,014			103	36,014
	New Haven, Conn			100	12,997	4	127	104	13,124			104	13,124
	Philadelphia, Pa	16	85,390	318	183,537	13	958	347	269,885			347	269,885
	Portland, Me	5	38,986	113	23,524	1	22	119	62,532			119	62,532
	Bangor, Me	2	491	94	8,037	1	2,047	97	10,575			97	10,575
Third district	Norfolk, Va			243	75,420	9	276	252	75,696	3	2,058	255	77,754
	Baltimore, Md	14	72,296	280	107,889	16	931	310	181,116			310	181,116
	Charleston, S. C			97	6,967	2	41	99	7,008			99	7,008
	Savannah, Ga			73	39,975	3	77	76	40,052			76	40,052
	Jacksonville, Fla			69	9,438	6	211	75	9,649			75	9,649
Fourth district	St. Louis, Mo			105	22,411	10	223	115	22,634			115	22,634
Fifth district	Dubuque, Iowa			70	6,882	8	449	78	7,331	2	303	80	7,634
	Duluth, Minn			182	268,389	7	288	189	268,677	2	369	191	269,046
Sixth district	Louisville, Ky			51	7,848	5	176	56	8,024			56	8,024
	Evansville, Ind			63	9,357	5	215	68	9,572			68	9,572
	Nashville, Tenn			79	10,286	1	30	80	10,316			80	10,316
	Memphis, Tenn			67	9,234	2	48	69	9,282			69	9,282
Seventh district	Cincinnati, Ohio			69	13,658	1	25	70	13,683			70	13,683
	Point Pleasant, W. Va			63	7,145			63	7,145	1	152	64	7,297
	Pittsburg, Pa			154	30,313			154	30,313	1	115	155	30,428
Eighth district	Detroit, Mich			119	140,384	2	60	121	140,444			121	140,444
	Chicago, Ill			202	205,036	6	130	208	205,166	1	438	209	205,604
	Grand Haven, Mich			165	48,712	1	18	166	48,730			166	48,730
	Marquette, Mich	6	4,736	82	21,473			88	26,209	1	148	89	26,357
	Milwaukee, Wis			244	237,815	7	251	251	238,066			251	238,066
	Port Huron, Mich	5	7,425	125	89,897	1	28	131	97,350			131	97,350
Ninth district	Cleveland, Ohio			238	507,449			238	507,449			238	507,449
	Buffalo, N. Y	13	17,716	301	408,037			314	425,753			314	425,753
	Oswego, N. Y	17	5,294	119	29,798	1	17	137	35,109			137	35,109
	Toledo, Ohio	3	2,059	91	71,839	1	15	95	73,913			95	73,913
	Burlington, Vt	3	910	38	4,756			41	5,666			41	5,666

Tenth district	New Orleans, La	37	146,411	294	60,664	22	675	353	207,750	5	4,351	358	212,101
	Apalachicola, Fla			73	9,844	9	315	82	10,159			82	10,159
	Galveston, Tex	13	61,273	75	12,451	22	825	110	74,549			110	74,549
	Mobile, Ala	10	12,493	137	13,755	13	473	160	26,721			160	26,721
	Total	419	2,423,304	7,539	4,193,709	265	15,482	8,223	6,632,495	39	20,376	8,262	6,652,871
	Total, 1906											8,705	6,505,245
	Increase (+) or decrease (−)											−443	+147,626

[a] 26 steamers, 1 sail, and 2 motor vessels, with 17,839 gross tonnage, inspected in Hawaiian waters.
[b] 11 steamers, with 7,495 gross tonnage, inspected in Porto Rican waters.

Classification of Inspections, Tonnage, and Officers Licensed According to the Several Divisions of Navigation for Fiscal Year ended June 30, 1907.

Division.	Vessels inspected.										Number and character of officers licensed.			
	Foreign steamers.		Domestic steamers.		Motor vessels.		Sail vessels and barges.		Total.		Steam vessels.	Motor vessels.	Sail vessels and barges.	Total.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
Pacific coast	43	219,861	961	512,818	53	4,856	5	4,659	1,062	742,194	2,191	1,564	124	3,879
Atlantic coast	269	1,945,126	3,372	1,433,458	88	6,365	21	9,841	3,750	3,394,790	7,546	4,423	125	12,094
Western rivers			765	119,267	38	1,420	6	939	809	121,636	1,997	1,004		3,001
Northern lakes	47	38,140	1,862	2,031,452	20	543	2	586	1,931	2,070,721	4,462	1,879	1	6,342
Gulf coast	60	220,177	579	96,714	66	2,288	5	4,351	710	323,530	1,301	1,415	8	2,724
Total	419	2,423,304	7,539	4,193,709	265	15,482	39	20,376	8,262	6,652,871	17,497	10,285	258	28,040

The foregoing statement of the number of all classes of vessels inspected during the fiscal year shows a decrease from the previous fiscal year of 443 in number, but an increased tonnage of 147,626, which is due to the large vessels that have been constructed taking the places of the smaller vessels that have gone out of commission.

Of the total number of 8,262 vessels inspected, 419 were foreign passenger steamers with a tonnage of 2,423,304, a decrease from the previous fiscal year of 2 in number and 13,462 in tonnage.

The number of domestic steamers inspected and certificated was 7,539, with a tonnage of 4,193,709, a decrease from the previous fiscal year of 364 in number and an increase of 182,549 in tonnage; 39 sail vessels and barges with a tonnage of 20,376 were inspected, a decrease from the previous year of 22 in number and 20,817 in tonnage.

Of motor vessels there were inspected and certificated 265, with a tonnage of 15,482, a decrease from the previous fiscal year of 55 in number and 644 in tonnage.

Of all classes of vessels inspected, the Pacific coast has an increase over the previous year of 53 in number and 76,276 in tonnage, the Atlantic coast a decrease of 248 in number and 94,110 in tonnage, the western rivers a decrease of 105 in number and 2,964 in tonnage, the northern or Great Lakes a decrease of 130 in number and an increase of 123,954 in tonnage, and the Gulf coast a decrease of 13 in number and an increase of 44,470 in tonnage.

MARINE BOILER PLATES TESTED.

During the year ended June 30, 1907, 5,824 marine boiler plates were tested at mills by assistant inspectors of this Service, under the act of Congress approved January 22, 1894. Of this number, 4,751 were accepted and 1,073 rejected, as follows:

MARINE BOILER PLATES INSPECTED AT MILLS BY ASSISTANT INSPECTORS, FISCAL YEAR ENDED JUNE 30, 1907.

Inspected by Assistant Inspector—	Plates rejected because of—										Total.		
	Spoiled at shears after inspection.	Lost in shipping house.	Tensile strength.	Elongation.	Lamination.	Light gauge.	Heavy gauge.	Reduced area.	Bad surface.	Bending test.	Rejected.	Accepted.	Inspected.
P. N. Knaggs, Milwaukee, Wis.	.....	.....	1	.....	.....	20	34	.....	30	.....	85	718	803
D. J. Dougherty, Pittsburg, Pa.	.....	.....	332	5	.....	33	42	100	78	165	755	1,438	2,193
E. G. Allen, Coatesville, Pa.	6	30	86	42	11	8	4	1	42	3	233	2,595	2,828
Total, 1907	6	30	419	47	11	61	80	101	150	168	1,073	4,751	5,824
Total, 1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,007
Decrease	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	183

In addition to these plates there were inspected at the mills a large number of steel bars for braces and stay bolts in marine boilers, and also several hundred plates for stock and repairs.

There were many requests from other branches and departments of the Government for tests of material at the mills, which tests were completed and reports rendered to the proper officials.

NEW LIFE-PRESERVERS INSPECTED.

During the fiscal year ended June 30, 1907, inspectors of this Service inspected new life-preservers, as follows:

LIFE-PRESERVERS INSPECTED, FISCAL YEAR ENDED JUNE 30, 1907.

Kind.	Passed.	Rejected.	Kind.	Passed.	Rejected.
Block cork	185,505	1,028	Cork life jackets	451	.....
Compressed cork	562	.....	Balsa wood	265	.....
Acme	8,195	4			
Tule	15,823	.....	Total	212,407	1,042
Consolidated cork	1,606	10			

The above statement of the number of new life-preservers examined shows an increase over the previous year of 1,375, or about 0.6 of 1 per cent. Of the number examined, 1,042, or about 0.5 of 1 per cent, were rejected, a decrease from the previous year of 901, or about 46 per cent.

OFFICERS LICENSED.

There were 28,040 officers of all grades licensed during the fiscal year ended June 30, 1907. The number licensed for each grade, by local districts, is shown in the following table:

OFFICERS LICENSED, FISCAL YEAR ENDED JUNE 30, 1907.

Local district.	Masters of steam vessels.	Mates of ocean steamers.	Mates of river steamers.	First-class pilots.	Second-class and special pilots.	Chief engineers.	Assistant engineers.	Special engineers.	Joint pilots and engineers.	Operators of motor vessels.	Engineers of motor vessels other than steam.	Masters of sail vessels of over 700 gross tons.	Mates of sail vessels of over 700 gross tons.	Masters or mates of vessels and barges of over 100 gross tons.	Total of all grades.
San Francisco, Cal.	375	142	14	18	26	280	244	....	....	433	72	50	13	7	1,674
Juneau, Alaska	7	....	2	.....	18	10	14	4	5	49	1	....	....	.....	110
Portland, Oreg	85	6	32	11	28	87	55	2	1	397	11	....	2	1	718
Seattle, Wash	231	103	....	.....	39	174	115	8	11	527	19	31	18	.....	1,276
St. Michael, Alaska	15	6	5	.....	2	8	6	....	2	50	5	1	1	.....	101
New York, N. Y	963	83	12	352	106	1,162	413	9	4	614	27	17	11	4	3,777
Albany, N. Y	62	....	9	37	52	99	97	5	1	23	....	....	....	.....	385
Bangor, Me	12	7	....	7	19	14	18	4	....	229	10	....	....	.....	320
Boston, Mass	212	47	2	47	79	205	164	14	5	238	28	32	9	.....	1,082
New Haven, Conn	34	....	1	13	29	36	26	3	1	155	10	2	....	.....	310
New London, Conn.	59	6	3	13	25	90	20	2	2	271	12	....	....	.....	503
Philadelphia, Pa	134	20	11	39	60	207	123	6	3	362	14	8	2	.....	989
Portland, Me	45	7	1	14	33	65	39	2	3	293	5	11	1	.....	519
Providence, R. I	52	3	1	14	33	107	51	6	3	230	13	1	....	.....	514
Norfolk, Va	153	13	....	49	76	171	80	19	3	914	26	5	1	1	1,511
Baltimore, Md	207	30	1	77	70	247	105	7	2	313	33	8	3	.....	1,103
Charleston S. C.	32	....	....	14	23	48	26	5	10	76	11	1	1	.....	247
Jacksonville, Fla.	42	....	1	15	25	38	20	6	1	423	17	1	....	.....	589
Savannah, Ga	52	4	2	18	14	49	21	....	3	71	5	4	2	.....	245
St. Louis, Mo	100	....	12	70	.....	108	43	6	2	142	9	....	....	.....	492
Dubuque, Iowa	101	....	11	14	21	75	51	2	2	220	12	....	....	.....	509
Duluth, Minn	46	....	....	21	19	73	38	2	2	58	....	....	....	.....	259
Louisville, Ky	59	....	6	15	9	34	26	2	....	47	6	....	....	.....	204
Evansville, Ind	45	....	....	15	21	29	32	1	....	141	6	....	....	.....	290
Memphis, Tenn	54	....	4	22	20	35	30	....	....	111	5	....	....	.....	281
Nashville, Tenn	42	....	6	24	9	52	35	5	....	65	1	....	....	.....	239
Cincinnati, Ohio	86	....	17	21	.....	57	36	1	1	53	1	....	....	.....	273
Pittsburg, Pa	135	....	17	19	2	105	29	7	3	18	....	....	....	.....	335
Point Pleasant, W. Va	65	....	16	25	11	61	32	1	....	107	....	....	....	.....	378

OFFICERS LICENSED, FISCAL YEAR ENDED JUNE 30, 1907—Continued.

Local district.	Masters of steam vessels.	Mates of ocean steamers.	Mates of river steamers.	First-class pilots.	Second-class and special pilots.	Chief engineers.	Assistant engineers.	Special engineers.	Joint pilots and engineers.	Operators of motor vessels.	Engineers of motor vessels other than steam.	Masters of sail vessels of over 700 gross tons.	Mates of sail vessels of over 700 gross tons.	Masters or mates of vessels and barges of over 100 gross tons.	Total of all grades.
Detroit, Mich	172	....	....	77	17	207	76	3	....	159	1	....	....	....	712
Chicago, Ill	136	....	3	62	56	117	102	14	7	113	9	....	....	....	619
Grand Haven Mich.	77	....	....	27	54	92	77	4	3	252	3	....	....	....	589
Marquette, Mich	29	....	....	7	25	32	25	2	1	51	....	....	....	....	172
Milwaukee, Wis	113	....	....	51	57	112	90	7	6	323	7	....	....	....	766
Port Huron, Mich	199	....	....	105	37	167	99	8	8	88	....	....	....	....	711
Cleveland, Ohio	185	....	....	69	30	149	98	1	....	68	....	....	....	....	600
Buffalo, N. Y	149	....	....	74	101	231	112	8	3	108	3	....	....	1	790
Burlington, Vt	8	....	....	5	14	17	9	6	6	61	....	....	....	....	126
Oswego, N. Y	56	....	....	20	32	25	38	2	1	498	3	....	....	....	675
Toledo, Ohio	63	....	....	34	35	54	60	3	....	74	....	....	....	....	323
New Orleans, La	199	13	8	71	92	193	111	9	13	376	52	....	1	....	1,138
Apalachicola, Fla	31	6	1	17	30	25	28	6	....	423	27	....	....	....	594
Galveston, Tex	40	4	1	15	24	29	39	9	3	323	36	1	....	....	524
Mobile, Ala	74	5	2	29	51	50	72	....	1	169	9	6	....	....	468
Total, 1907	5,036	505	201	1,647	1,524	5,226	3,025	211	122	9,776	509	179	65	14	28,040
Total, 1906	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7,886
Increase	....	....	....	....	....	....	....	....	....	....	....	....	....	....	20,154

EXAMINATIONS FOR COLOR BLINDNESS.

During the year ended June 30, 1907, 1,473 applicants were examined for color blindness, of which number 35 were found color-blind and rejected and 1,438 were passed. As compared with the previous fiscal year, these figures show a decrease of 31 in the number of applicants examined and 27 in number of applicants passed.

ACCIDENTS AND LIVES LOST.

The total number of accidents resulting in loss of life during the fiscal year ended June 30, 1907, was 55, with a total life loss of 505. Classified according to causes, the accidents and deaths are shown in the following table:

ACCIDENTS RESULTING IN LOSS OF LIFE, FISCAL YEAR ENDED JUNE 30, 1907.

Cause.	Accidents.	Lives lost.	Cause.	Accidents.	Lives lost.
Fire	3	31	Accidents to machinery	4	4
Collision	17	193	Snags, wrecks, and sinking	18	55
Explosions or accidental escape of steam	6	27	Accidental drowning	....	129
Breaking of steam pipes, mud drums, etc	2	3	Miscellaneous	5	63
			Total	[a] 55	[b] 505

[a] Decrease of 10 over previous year. [b] Increase of 5 over previous year.

Classified according to supervising inspection districts, the loss of life was as follows:

LIVES LOST AS A RESULT OF ACCIDENTS, FISCAL YEAR ENDED JUNE 30, 1907, BY SUPERVISING INSPECTION DISTRICTS.

District.	Fire.	Collision.	Explosions or accidental escape of steam.	Breaking of steam pipes, mud drums, etc.	Accidents to machinery.	Snags, wrecks, or sinking.	Accidental drowning.	Miscellaneous.	Total.
First		42			1	4	14	15	76
Second		143	13		1	18	21	15	211
Third	25	2			1	6	18	7	59
Fourth							2	1	3
Fifth						1	5	3	9
Sixth			3				21	4	28
Seventh		1				1	15	2	19
Eighth	6	4			1	23	9	8	51
Ninth				2		2	7	6	17
Tenth		1	11	1			17	2	32
Total	31	193	27	3	4	55	129	63	505

The foregoing statement marks an increase of about 1 per cent over the loss of life reported for the previous fiscal year, due principally to the following disasters: The collision between the steamers *Dix* and *Jeanie* on Puget Sound, on the night of November 18, 1906, when 42 of the 76 persons on board the *Dix* lost their lives when that steamer sank; the explosion of the boilers of the steamer *W. T. Scovell* at Vicksburg, Miss., resulting in the loss of 10 lives; the sinking of the steamer *Larchmont* after collision with the schooner *Harry Knowlton* in Block Island Sound, on the night of February 11, 1907, when 133 of the *Larchmont's* passengers and crew perished; the burning of the steamer *Marion* in Wadmalaw Sound, South Carolina, on the night of February 22, 1907, when 12 persons lost their lives, and the foundering of the steamer *Arcadia* on the east shore of Lake Michigan, on April 13, 1907, by which 11 lives were lost.

The most serious disaster of the year was the sinking of the *Larchmont*. The weather was very cold (thermometer at or about zero), and a strong gale was blowing from west-northwest. The night was dark, but clear, and signal lights could be seen a sufficient distance to have avoided collision, but notwithstanding this the schooner rammed the steamer at or about right angles on the port side, cutting into the fire room and totally disabling the steamer, which sank in about ten minutes or less. Only a few of those on the *Larchmont* were fortunate enough to get into the boats, and most of these died from exposure before they reached Block Island, whither they drifted before the gale. The disaster was thoroughly investigated by the officers of this Service, and the responsibility determined, but those who were found responsible for it had passed beyond the jurisdiction of human authority.

Of the total number of 505 lives lost 129 were from accidents for which the victims were entirely responsible, and 63 from suicide and other causes beyond the power of the Service to avert. This leaves 313 lives lost that can be fairly charged to accident, collision, or foundering.

NUMBER OF PASSENGERS CARRIED.

During the calendar year ended December 31, 1906, 357,794,491 passengers were carried on steamers which are required by law to make report, an increase of 27,558,532, or nearly 8 per cent over the previous year. Taking the total loss of life as 505, a ratio of 1 life for every 708,503 passengers carried is shown.

MOTOR VESSELS.

By reference to the statistics of inspection of the different classes of vessels (p. 318), it is shown that there was a decrease from the previous year of 55 in number and 644 in tonnage of motor vessels inspected, a most remarkable showing when the fact is considered that the annual increase in the number of these vessels is enormous and that they are undoubtedly entering largely into commercial trade.

In the early history of these vessels they were operated almost entirely for pleasure, and but few of them were engaged in carrying freight or passengers for hire; but their adaptability and utility for nearly all commercial purposes in the way of marine transportation has encouraged their building and operation. If they are of 15 tons or less they are subject to no inspection whatever and are not required to carry licensed officers, except in the case of carrying passengers for hire, when it is only necessary that they shall have a licensed operator and have a life-preserver on board for each passenger carried. No examination is necessary under the law as a requisite for securing this "operator's" license, and we are now licensing the incompetency that we formerly deprecated and condemned. If these vessels are used for pleasure purposes only, they are exempted entirely from the restrictions applying to steam vessels, so far as inspection and carrying licensed officers are concerned, no matter what their size or the waters they navigate. If they are engaged in passenger service, the number of their passengers can not be restricted, as section 4464, Revised Statutes, governing this condition, applies only to steam vessels.

Vessels of any character of less than 5 tons are not licensed or enrolled by the customs authorities, and as a consequence there are thousands of motor boats under 5 tons that have no name and practically no identity whatever so far as the purposes of this Service are concerned, many of which are, no doubt, carrying passengers for hire, yet we have no record of these vessels and have no official knowledge of their existence.

Under the law governing lights, whistles, rules of the road, etc., any vessel propelled by machinery is considered a steam vessel, and the smallest motor launch is by law required to carry the same lights, etc., as required of the largest vessel navigating the same waters. This inconsistency has developed a practice that is both confusing and dangerous, and Congress should either enact a law governing this condition or authorize the Board of Supervising Inspectors to formulate rules and regulations by which the requirements for lights, etc., may be prescribed.

To show the inconsistency and impracticability of the law upon this matter, I would refer to article 2 of the act of Congress approved June 7, 1897, which requires that—

A steam vessel [which contemplates any vessel propelled by machinery] when under way shall carry—

(*a*) On or in front of the foremast, or, if a vessel without a foremast, then in the fore part of the vessel, a bright white light so constructed as to show an unbroken light over an arc of the horizon of twenty points of the compass, so fixed as to throw the light ten points on each side of the vessel, namely, from right ahead to two points abaft the beam on either side, and of such a character as to be visible at a distance of at least five miles.

(*b*) On the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the starboard side, and of such a character as to be visible at a distance of at least two miles.

(*c*) On the port side a red light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the port side, and of such a character as to be visible at a distance of at least two miles.

(*d*) The said green and red side lights shall be fitted with inboard screens projecting at least three feet forward from the light so as to prevent these lights from being seen across the bow.

(*f*) All steam vessels (except seagoing vessels and ferryboats) shall carry in addition to green and red lights required by article two (*b*), (*c*), and screens as required by article two (*d*), a central range of two white lights, the after-light being carried at an elevation at least fifteen feet above the light at the head of the vessel. The head-light shall be so constructed as to show an unbroken light through twenty points of the compass, namely, from right ahead to two points abaft the beam on either side of the vessel, and the after-light so as to show all around the horizon.

The act of Congress approved January 18, 1897, authorized the Board of Supervising Inspectors to prescribe regulations relating to lights, fog signals, and steering and sailing rules for motor vessels without regard to tonnage or use, and under this authority the Board did prescribe rules and regulations; but the act of Congress approved June 7, 1897, which took effect four months later, repealed the former act and the regulations made in pursuance thereof, so that to-day the law prescribes the same lights for a small motor vessel as it does for a large steamer on the same waters—an impracticable and impossible requirement.

Under the law every steam vessel without regard for size or service must be inspected and carry licensed officers, and the inconsistency of exempting a vessel from these requirements merely because she is propelled by a motor other than steam is made more apparent when we consider that these motor vessels are operated side by side and in open competition with steam vessels, but under practically no expense when compared with that of operating steamers. Aside from the fact that the navigation of every vessel should be under the care of competent and careful men it is not right that the steam vessel should be discriminated against in favor of the motor vessel.

This Bureau has recently instituted a service investigation regarding this particular class of vessel, and while the reports from all the different districts have not been received, enough have come to hand to justify the conclusion that the question of the operation of motor vessels is sufficiently grave and important to demand our best thought and our best effort toward its regulation. A conservative estimate of 7,500,000 passengers carried on these vessels in the

Second district alone during the past summer gives an idea of the extent of the operation of these vessels and suggests a warning that should not be allowed to go unheeded.

While I do not believe that it is necessary to enroll or license the vessels of this class under 5 tons, I do think that steps should be taken to have them registered or listed at the custom-house for the district in which they are owned or operated in order that the Government may have some knowledge of their existence at least, and I would recommend such action as will bring about this result. In this connection I desire to call your attention to and renew my recommendations upon this subject in previous reports, and also to earnestly recommend that Congress will so amend the laws upon this subject as to place the regulation of this class of vessel under the authority of the Board of Supervising Inspectors. The Board can then formulate rules and regulations for the navigation of motor vessels that will tend to minimize accidents and conduce to the public safety.

Conditions as regards motor boats in the Second supervising inspection district, which may be judged to be typical of those existing in the other districts, are thus reported by the supervising inspector for that district:

DEPARTMENT OF COMMERCE AND LABOR,
STEAMBOAT-INSPECTION SERVICE,
OFFICE OF SUPERVISING INSPECTOR, SECOND DISTRICT,
New York, N. Y., November 6, 1907.

SIR: As instructed by you, I have the honor to make the following report of the motor-boat business in the Second supervising inspection district in the season of 1907.

The report made you on September 13 was intended to convey, in general terms, such information on the subject as I had personally collected, while this report will be more statistical in form and based on information obtained since September 15 from officers of 44 of the 45 customs collection districts and 9 inspection districts in this supervising inspection district.

In the Aroostook collection district there are no waters under Federal jurisdiction. In the Bangor district the majority of the motor boats are in waters under the State of Maine inspectors. By conference with the State inspector of hulls I learn that there are about 1,500 motor boats in the State waters of Maine. They and those in other States in waters not under Federal jurisdiction are not considered in this report.

In this season I have visited 40 collection districts and 7 important subdistricts to consult with the customs officers and obtain information concerning motor-boat business.

I have obtained answers to a series of 22 questions from each collector and have submitted to the local boards the answers of the collectors of their respective districts.

The following are the collectors' answers to the question asking the total number of motor boats of all sizes and kinds operated this season in their waters:

ESTIMATE OF THE MOTOR BOATS OF ALL SIZES AND CLASSES OPERATED IN THE SECOND DISTRICT IN THE SEASON OF 1907.

Collection district.	Motor boats.
Bangor district:	
Passamaquoddy	500
Machias	400
Frenchmans Bay	400
Castine	200
Bangor	25
Belfast	500
Waldoboro	500
Total	2,525
Portland district:	
Wiscasset	300
Bath	1,500
Portland	300
Saco	60
Kennebunk	100
York	35
Portsmouth	150
Total	2,445
Boston district:	
Newburyport	1,000
Gloucester	1,000
Marblehead	1,475
Salem	935
Boston	1,000
Plymouth	400
Barnstable	500
Nantucket (1906)	12
Edgartown	92
Total	6,414
Providence district:	
New Bedford	200
Fall River	325
Providence	1,000
Providence district—Continued.	
Bristol	100
Newport	410
Total	2,035
New London district:	
Stonington	150
Sag Harbor	250
New London	230
Hartford	300
Total	930
New Haven district:	
New Haven	1,000
Bridgeport	1,250
Total	2,250
Albany and New York districts:	
New York	5,000
Newark	1,000
Perth Amboy	1,500
Total	7,500
Philadelphia district:	
Tuckerton	100
Somers Point	1,200
Bridgeton	500
Burlington	620
Philadelphia	1,000
Wilmington	200
Cherrystone	50
Total	3,670
Grand total	27,769

The Bangor board concur in the total 2,525 for that district.

The Portland board consider the estimate high in Bath and low in Portland, but agree to the total 2,445 in their inspection district.

The Boston board place the total for their district at the round number of 4,000, but the opportunities of the members of the board to see the boats in the busy season have been limited, and the supervising inspector, who has visited each collection district and counted boats wherever possible, believes the collectors to be right in their estimates and accepts their total of 6,414.

The Providence board give no estimate for their district, which the collectors place at 2,035. The supervising inspector considers the estimate from Fall River and Bristol somewhat less than the actual number, but not enough less to justify any change of the total.

The New London board estimate the total for their district at 1,350, while the collectors' figures are 930. There are two or three harbors in the New London district where the pleasure vessels have gathered in large numbers this season, and these have not been sufficiently considered by the collectors. I therefore used the board's estimate.

The New Haven board include parts of Long Island, both on the Sound and seashore. They estimate the total number of motor boats in their district at 3,200, which I believe is about right. The excess over 2,250 in the Bridgeport and New Haven collection districts will be considered with the New York district, and the collectors' figures used.

The Albany and New York inspection districts, with the part of the New Haven district above referred to, cover the waters of the New York, Perth Amboy, and Newark collection districts. The supervision of General Clarkson and the reports of his corps of assistants makes his estimate, combined with those of the collectors at Newark and Perth Amboy, much more reliable than any which the steamboat inspectors could be expected to make, and we therefore use the collectors' estimates, which are 7,500.

The Philadelphia board have taken considerable trouble to gather reliable information of this season's motor-boat business, and I believe their estimate of 3,700 can be accepted. It is only 30 more than the total of the collectors' figures. That increase is in the Cherrystone district, where the collector reports only 50 boats. The portion of the Cherrystone district which is in the Philadelphia inspection district is the coast of Maryland and Virginia from the Delaware State line to Cape Charles. There is no steamer there, and there has been heretofore little to require a visit from either the customs or steamboat-inspection officers. We know that there are some passenger motor boats operated in Chincoteague and quite a number of motor-driven oyster and fishing vessels on the Maryland shore.

CORRECTED ESTIMATE OF THE MOTOR BOATS OF ALL SIZES AND CLASSES OPERATED IN THE SECOND DISTRICT IN THE SEASON OF 1907.

District.	Motor boats.	District.	Motor boats.
Bangor	2,525	Albany, New York, and part of New Haven	7,500
Portland	2,445	Philadelphia	3,700
Boston	6,414		
Providence	2,035		
New London	1,350	Total	28,219
New Haven	2,250		

The estimated number of oyster, lobster, and fishing motor boats in the collection districts is as follows:

Collection district.	Motor fishing boats.	Collection district.	Motor fishing boats.
Bangor district:		Providence district—Continued.	
Passamaquoddy	300	Bristol	15
Machias	300	Newport	150
Frenchmans Bay	200		
Castine	100	Total	400
Bangor	(a)		
Belfast	20	New London district:	
Waldoboro	300	Stonington	50
		Sag Harbor	75
Total	1,220	New London	20
		Hartford	10
Portland district:			
Wiscasset	6	Total	155
Bath	225		
Portland	100	New Haven district:	
Saco	15	New Haven	(a)
Kennebunk	25	Bridgeport	150
York	15		
Portsmouth	25	Total	150
Total	411	New York and Albany districts:	
		New York	750
Boston district:		Newark	100
Newburyport	50	Perth Amboy	300
Gloucester	250		
Marblehead	50	Total	1,150
Salem	25		
Boston	150	Philadelphia district:	
Plymouth	200	Tuckerton	88
Barnstable	225	Somers Point	50
Nantucket	10	Bridgeton	375
Edgartown	67	Burlington	50
		Philadelphia	(b)
Total	1,027	Wilmington	100
		Cherrystone	20
Providence district:			
New Bedford	30	Total	683
Fall River	5		
Providence	200	Grand total	5,196

a No data. b No estimate.

The total, 5,196, is believed to be a fair estimate of the motor boats which are most of the time engaged in some sort of fishing. In order to ascertain how large a proportion of these boats were part of the time passenger boats, the following question was asked: "Were most of such boats cleaned up on Saturdays and the day before holidays, ready for passenger business on the following days?" The answers were as follows:

Collection district.	Answer.	Collection district.	Answer.
Passamaquoddy	Very few.	Plymouth	Not many.
Machias	No.	Barnstable	A very few.
Frenchmans Bay	Many fish except in summer, and then are passenger boats.	Nantucket	Yes.
		Edgartown	Probably not.
		New Bedford	No.
		Fall River	No.
Castine	No.	Providence	No.
Bangor	No.	Bristol	No.
Belfast	No.	Newport	No.
Waldoboro	No.	Stonington	Not many.
Wiscasset	No.	Sag Harbor	No.
Bath	No.	New London	No.
Portland	No.	Hartford	Don't know.
Saco	About half of them do so.	New Haven	Can not say.
		Bridgeport	No.
Kennebunk	Not many.	New York	Many did.
York	No.	Newark	Very few.
Portsmouth	No.	Perth Amboy	Some.
Newburyport	Not often.	Tuckerton	Some during the summer.
Gloucester	Many fishing boats do passenger business 2 months a year.	Somers Point	No.
		Bridgeton	Don't know.
		Burlington	No.
Marblehead	Not many.	Philadelphia	No.
Salem	Not many.	Wilmington	No.
Boston	Don't know.	Cherrystone	Don't know.

Combining these answers with other information, I believe:

That most of the small oystermen around New York are occasionally passenger vessels. The large motor-driven oystermen are never in passenger business.

The lobster fishermen do not often carry passengers, as the passenger season is the time for lobster catching.

The motor-propelled sardine-fishing boats are tank boats and unsuitable for carrying passengers.

At Provincetown I learned that when the fleet was there, and for two months of summer, all the cod fishermen were passenger boats. Nearly all the coast hotels and boarding houses have motor boats for the use of their guests. Two-thirds of such boats are nominally fishing boats.

There are twice as many passenger boats documented as oyster boats as documented passenger boats.

Many motor boats claim to be classed as fishing boats because a large part of the freight they carry is fish. I found that the large motor boats in the Cherrystone district, while documented as fishing boats, were in June engaged in carrying new potatoes to the railroad.

Of the 5,196 motor fishing boats, 399 only were documented.

The local boards of steamboat inspectors, having been given the answers of the collectors to the questions concerning fishing boats, were asked, "How many of the motor boats in your district are exclusively engaged in fishing?" and replied as follows:

District.	Motor boats exclusively engaged in fishing.	District.	Motor boats exclusively engaged in fishing.
Bangor	100	New Haven	200
Portland	450	New York	350
Boston	600	Albany	None.
Providence	(a)	Philadelphia	573
New London	160		

a No idea.

Allowing that half of the so-called oyster or fishing boats in the Providence district are always fishermen, the total would be 2,433.

We may safely conclude that there are in the Second district 2,500 motor boats engaged in fishing only, and 2,500 which are sometimes fishing vessels and sometimes passenger vessels.

When asked the question "How many of them (the motor boats in their district) do you think were pleasure boats?" the estimates were as follows:

Collection district.	Pleasure motor boats.
Bangor district:	
Passamaquoddy	150
Machias	100
Frenchmans Bay	150
Castine	75
Bangor	25
Belfast	400
Waldoboro	200
Total	1,100
Portland district:	
Wiscasset	200
Bath	1,200
Portland	200
Saco	40
Kennebunk	75
York	15
Portsmouth	125
Total	1,855
Boston district:	
Newburyport	900
Gloucester	700
Marblehead	1,400
Salem	900
Boston	750
Plymouth	100
Barnstable	250
Nantucket	1
Edgartown	23
Total	5,024
Providence district:	
New Bedford	150
Fall River	240
Providence	500
Providence district—Continued.	
Bristol	60
Newport	110
Total	1,060
New London district:	
Stonington	80
Sag Harbor	125
New London	200
Hartford	270
Total	675
New Haven district:	
New Haven	500
Bridgeport	1,000
Total	1,500
Albany and New York districts:	
New York	4,000
Newark	800
Perth Amboy	1,000
Total	5,800
Philadelphia district:	
Tuckerton	10
Somers Point	900
Bridgeton	125
Burlington	570
Philadelphia	900
Wilmington	90
Cherrystone	30
Total	2,625
Grand total	19,639

The following question was asked each collector: "Did many of the owners of these pleasure boats occasionally take out parties for hire or lease the boat for the day or week?" To this they replied:

Collection district.	Answer.
Passamaquoddy	Quite a number.
Machias	Yes.
Frenchmans Bay	Perhaps half do.
Castine	Yes.
Bangor	Not many.
Belfast	Not many.
Waldoboro	Very few.
Wiscasset	Yes.
Bath	Yes.
Portland	None from Portland; some from other places in district.
Saco	Only with licensed operator.
Kennebunk	Yes.
York	No.
Portsmouth	Some do.
Newburyport	Don't know.
Gloucester	Many do.
Marblehead	Not many.
Salem	About $\frac{1}{10}$ did.
Boston	Not many.
Plymouth	Some do.
Barnstable	Some—not many.
Nantucket	No.
Edgartown	Some occasionally.
New Bedford	Some.
Fall River	Some; very few.
Providence	A few do.
Bristol	Think not.
Newport	No.
Stonington	Not many.
Sag Harbor	Some; not many.
New London	Not many.
Hartford	Some do.
New Haven	Some.
Bridgeport	Most do not.
New York	All but 1 per cent do.
Newark	A good many.
Perth Amboy	Quite a number did.
Tuckerton	No.
Somers Point	Not many.
Bridgeton	Don't know.
Burlington	No.
Philadelphia	Not many.
Wilmington	Not many.
Cherrystone	Not many.

The opinions of the inspection boards as to whether many pleasure boats, so-called, were part of the time passenger boats, are expressed by their estimates of the number of boats exclusively pleasure in character:

District.	Pleasure motor boats carrying passengers.	District.	Pleasure motor boats carrying passengers.
Bangor	400	New Haven	2,000
Portland	1,500	Albany	190
Boston	3,000	New York	500
Providence	(a)	Philadelphia	2,665
New London	980		

a Don't know.

From the data given by the collectors of the Providence inspection district, I suppose that 600 of the 1,060 so-called pleasure motor boats may be exclusively for pleasure purposes. This would make a total of 11,235, deducting which from 19,639, leaves 8,404 boats which are sometimes in passenger business.

There are 91 motor boats in this district documented as freight, towing, or water boats. It is not probable that any freight boats refuse profitable passenger business, and for such rough statistics as these we can consider the freight boats as passenger boats and divide the motor boats into but three classes—fishing, pleasure, and passenger. The collectors' estimates of the number of passenger motor boats are:

Collection district.	Motor passenger boats.	Collection district.	Motor passenger boats.
Bangor district:		Providence district—Continued.	
Passamaquoddy	(a)	Bristol	(d)
Machias	(b)	Newport	150
Frenchmans Bay	c 1	Total	520
Castine	25		
Bangor	(d)	New London district:	
Belfast	1	Stonington	20
Waldoboro (regular)	1	Sag Harbor	50
Total	28	New London	10
		Hartford	20
Portland district:		Total	100
Wiscasset	75		
Bath	100	New Haven district:	
Portland	1	New Haven	80
Saco	7	Bridgeport	100
Kennebunk	(e)	Total	180
York	5		
Portsmouth	6	Albany and New York districts:	
Total	194	New York	250
		Newark	100
Boston district:		Perth Amboy	200
Newburyport	50	Total	550
Gloucester	50		
Marblehead	25	Philadelphia district:	
Salem	10	Tuckerton	2
Boston	100	Somers Point	250
Plymouth	100	Bridgeton (documented)	16
Barnstable	25	Burlington	(d)
Nantucket	1	Philadelphia	100
Edgartown	2	Wilmington	10
Total	363	Cherrystone	(d)
		Total	378
Providence district:			
New Bedford	20	Total (37 districts)	2,310
Fall River	50		
Providence	300		

a "None regularly."
b "Very few."
c "Known only."
d "None known."
e "None in regular business."

The numbers of licensed operators in each inspection district, up to the date of the reports, were as follows:

District.	Licensed operators.	District.	Licensed operators.
Bangor	353	New York	1,070
Portland	391	Albany	37
Boston	375	Philadelphia	646
Providence	272		
New London	364	Total	3,745
New Haven	237		

Applications for license are being received daily, although the season is past, and the indications are that not only will there be a greatly increased passenger business, but many men who ran a passenger boat without a license this year will next season operate under license.

The official list for 1906 gives data concerning but 107 passenger or ferry motor boats in this district. Of the thousands of motor boats which carried passengers on the Maine coast in 1907 only 3 are documented as passenger or ferry boats.

The steamboat-inspection boards being asked how many boats running in their waters in 1907 should have been operated by a licensed man, replied as follows:

District.	Boats that should have licensed operators.	District.	Boats that should have licensed operators.
Bangor	2,000	New Haven	1,000
Portland	1,725	New York (licenses)	1,070
Boston	900	Albany (licenses)	37
Providence	(a)	Philadelphia	2,000
New London	1,000		

a Don't know.

The Bangor, Portland, Boston, New London, New Haven, and Philadelphia boards issued 2,366 licenses, and estimate that 8,625 men should have had them. Using this proportion to supply the lack of data from the others, we find that Providence required 990, Albany 135, and New York 3,895. This is, of course, little better than guess work, but it agrees well with the impressions of General Clarkson and the collectors of the Providence, Newport, and Perth Amboy districts.

Using these figures, we have a total of 13,645 motor boats which in the season of 1907 regularly or occasionally carried passengers for hire. This estimate seems high. After my interviews with the collectors and their assistants I increased my own previous estimates to 12,000, of which I considered about 3,000 might be called regular passenger boats; but every correction, whether made by steamboat inspector or customs officer, has increased previous estimates. Each man believed his own estimates conservative, but the totals too great.

The answers to the question, What is your idea of the number of passengers carried in your district in motor boats in the 1907 season? were as follows:

Collection district.	Passengers carried.	Collection district.	Passengers carried.
Passamaquoddy	(a)	Fall River	30,000
Machias	(a)	Providence	80,000
Frenchmans Bay	(b)	Bristol	(a)
Bangor	(c)	Newport	150,000
Castine	6,000	Stonington	(b)
Belfast	d 500	Sag Harbor	70,000
Waldoboro	1,000	New London	15,000
Wiscasset	(b)	Hartford	10,000
Bath	e 100,000	New Haven	(g)
Portland	(a)	Bridgeport	50,000
Saco	(b)	New York	3,750,000
Kennebunk	(f)	Newark	50,000
York	3,500	Perth Amboy	250,000
Portsmouth	12,000	Tuckerton	(b)
Newburyport	10,000	Somers Point	h 130,000
Gloucester	30,000	Others	120,000
Marblehead	30,000	Bridgeton	(b)
Salem	30,000	Burlington	0
Boston	(b)	Philadelphia	(b)
Plymouth	20,000	Wilmington	(b)
Barnstable	10,000	Cherrystone	(b)
Nantucket	2,200		
Edgartown	20,000	Total (26 collection districts)	5,000,200
New Bedford	10,000		

a "Very few."
b "No idea."
c "Not many."
d "Don't know; perhaps 500."
e "New Meadows River Line carried from 8,000 to 10,000."
f "Couldn't guess."
g "Couldn't estimate."
h Reported.

Six boards of inspectors made the following estimates of the number of passengers carried in their districts:

District.	Passengers carried.	District.	Passengers carried.
Bangor	75,000	New Haven	950,000
Portland	400,000	Philadelphia	2,772,000
Boston	150,000		
New London	90,000	Total	4,437,000

If we add to this the collectors' figures for the districts in the Providence, New York, and Albany inspection districts—4,320,000—we would have a total of 8,757,000, which perhaps is a reasonable estimate.

The differences between the estimates of the Bangor and New London boards and those of the Portland and New Haven boards show how little is really known on this point.

Outside of the motor-boat ferry lines, so called, on the New Meadows River, Patchogue and Water Island, Amityville and Hemlock Beach, One hundred and thirty-fourth street and Classons Point, and Bridgeton and Fortesque, we can only base figures on the number and size of the boats, number of trips, and average load of passengers. In some cases, where the steamers were taken off the line toward the end of the season, they were replaced by motor boats. In some cases, where a steamer had to be laid off temporarily, her place was taken by a motor boat.

There were no reports required from motor boats of the passengers they carried, except in the Somers Point district, where the regular motor boats reported carrying 130,000 passengers subsequent to July 17. If that report were taken as a base on which to estimate the entire business, it would make at least 20,000,000 carried in this district.

As the Philadelphia board's estimate is the highest, relatively, I give the method by which they arrived at their figures: "426 passenger boats, average tonnage 6 tons, 5 passengers to a ton, averaging two trips a day, and operating 25 days per month for four months during the year, would be 2,772,000." This seems a common-sense method, but if applied to the entire district would make 30,000,000 passengers carried. I regret that my information is so nonconclusive on this point, but the reasons given above will, I trust, make it excusable.

You ask in your telegram for the tonnage of the passenger motor boats. The collector's answers need not be quoted in detail. They varied in different districts from 13 tons to 2.5 tons, and average 4.3 tons. The figures of the boards of inspectors vary according to the general character of the business—the New York board say 3 tons on rivers and 12 tons on the bays; on the Maine coast, 4 tons; in the Boston district, 3 tons, and in the Philadelphia district 6 tons. The tonnage of documented boats is as follows:

Description.	Boats.	Total tonnage.	Average tonnage.
Fishing boats	409	7,653	18.8
Freight boats	91	2,417	26.6
Passenger boats	112	1,399	12.5
Commercial boats, all kinds	769	13,298	17.1

In the list appended the Portland board estimates 163 passenger motor boats to aggregate 475 tons, an average of a little less than 3 tons, but these boats are those under the more recently licensed operators, and probably that board's estimate of 4 tons for them all is correct. There is one motor vessel of 2,000 tons in this district, and there are many of less than 1 ton.

The collectors were asked as to the average number of passengers carried, and whether 5 passengers per ton of boat was a fair estimate of the general passenger business in the motor boats of their districts. The answers to the first question vary from 5 passengers to 25; the average of all is over 12 passengers. The answers to the second question vary. Some said "Yes," but more consider 5 passengers to a ton more than are carried generally. The steamboat inspectors generally agree with the collectors on these points.

When asked the question "Were 10 passengers per ton of boat the most you have ever seen carried?" 36 collectors said that they never saw so many carried. The others replied as follows:

Collection district.	Answer.
Saco	Have seen more than 10 per ton carried once or twice.
Portland	Have seen more, perhaps.
Bath	Have seen 74 passengers in a boat of less than 5 tons, and heard of 100 being carried in a boat of that size.
Wiscasset	Not often.
Passamaquoddy	Yes.
Newport	Once or twice.
Fall River	Yes; have seen more.
Nantucket	Yes.

The supervising inspector knows of two cases besides the above where more than 10 persons per ton of boat were carried. The case reported by the collector of Bath is the grossest overloading known to us.

In answer to the question "Do you think these boats carried more passengers than was safe?" 10 collectors replied "No," 5 replied "Yes," and the answers of the others were "Sometimes," "Occasionally," "Not here," "Probably," "Am sure they did," and expressions of doubt. The steamboat inspectors recognize the fact that these boats were at times greatly overloaded.

In answer to the question "What would you consider a safe number of passengers per ton of boat?" the collectors' answers varied, largely according to the waters of the route. The average was between 4 and 5. The inspectors' views on this point vary from 4 to 7 per ton, the average being about 5 persons to ton of boat.

As to equipments, each collector was asked "Do you think they carried life-preservers for all on board?" 22 answers were "No;" 5 others answered "Not when rushed with business," "Sometimes not," "Probably not," "Only licensed

operators did," and "Think not;" 5 answered "Yes," and the remaining 12 replied "As a rule they do," "Generally, yes," "Yes, as far as known," "It is so ordered," "Generally they do," "Don't know," "Generally did," "Generally," "Since June they have," "Those that have licenses do," and "Now they do."

The inspectors' replies indicate that at the commencement of the 1907 season few motor passenger boats carried life-preservers, but that by the end of the season most of them in the larger ports had provided for them. As late as the middle of August only a small percentage carried life-preservers. The suspension of the license of some operators for failing to carry the required number has had a good effect.

The collectors were asked two questions in regard to lights:

"(18) Do the motor boats in your waters show side lights?"

"(19) Do they hang up a white light when they anchor at night?"

The answers to both questions are given below.

Collection district.	Answer to No. 18.	Answer to No. 19.
Passamaquoddy	Large boats, yes; small ones, no.	Large boats do; small do not.
Machias	No	No.
Frenchmans Bay	1 in 10 does	Not often.
Castine	Yes, they do here	No.
Bangor	No	They tie up.
Belfast	Yes	Yes.
Waldoboro	No	No.
Wiscasset	No	Generally tie up.
Bath	Not always	Not always.
Portland	No	Seldom.
Saco	Yes	They don't anchor.
Kennebunk	No	They tie up.
York	No	No.
Portsmouth	Most do not	Most do not.
Newburyport	Most do not	No.
Gloucester	Not often	Seldom.
Marblehead	Not as a rule	Generally do.
Salem	Not all	No.
Boston	Sometimes	No.
Plymouth	No	Very few do.
Barnstable	Most do not	No.
Nantucket	Yes	Yes.
Edgartown	Very few	Generally.
New Bedford	Some do	Think not.
Fall River	Many times, no	No.
Providence	Generally	Not generally.
Bristol	Yes	Most do.
Newport	Some do	More than half do.
Stonington	No	Not always.
Sag Harbor	Almost always	No.
New London	Yes	As far as known.
Hartford	Not all	No.
New Haven	As far as known	As far as known.
Bridgeport	They are now commencing to do so.	Yes.
New York	Generally, no; improving	Not generally.
Newark	No	No.
Perth Amboy	Very few do	No.
Tuckerton	Since June they do	Yes, since June.
Somers Point	No	No.
Bridgeton	No	Generally.
Burlington	Not until lately	Now they do.
Philadelphia	Not often	Not often.
Wilmington	Some do	Not always.
Cherrystone	So directed	Have been told to do so.

The boards of steamboat inspectors confirm in general these reports of the collectors.

The observations of the supervising inspector are that most motor boats, especially pleasure boats, fail to show anchor lights. In regard to side lights, there has been a marked improvement, especially in Long Island Sound. Recent observations are to the effect that four motor boats out of five met on the Sound show some lights, and that only one sail vessel in five does.

The collectors were asked these two questions:

"20. How many assistants (special inspectors) have you had this season on this class of work?"

"21. How many additional men would it require to see that these motor boats were not overloaded, were properly equipped, and operated by licensed officers?"

The replies to both questions are given below:

Collection district.	Answer to No. 20.	Answer to No. 21.	Total men required.
Bangor district:			
Passamaquoddy		4	4
Machias		5	5
Frenchmans Bay		10	10
Bangor		1	1
Belfast		6	6
Waldoboro		25	25
Total			51
Portland district:			
Wiscasset	3	1	4
Bath	1	10	11
Portland		6	6
Saco	1	2	3
Kennebunk	1	4	5
York		1	1
Portsmouth		2	2
Total			32
Boston district:			
Newburyport		4	4
Gloucester		4	4
Marblehead		5	5
Salem		4	4
Boston	10		10
Plymouth		5	5
Barnstable	1	9	10
Edgartown	2	3	5
Total			47
Providence district:			
New Bedford		2	2
Fall River		2	2
Providence	9	3	12
Bristol		2	2
Newport	(a)	8	8
Total			26
New London district:			
Stonington		4	4
Sag Harbor		3	3
New London	3		3
Hartford		6	6
Total			16
New Haven district (not including Long Island):			
New Haven		6	6
Bridgeport		6	6
Total			12
Albany and New York districts:			
New York	30		30
Newark		6	6
Perth Amboy		4	4
Total			40
Philadelphia district:			
Tuckerton		5	5
Somers Point	5	2	7
Bridgeton		2	2
Burlington		5	5
Philadelphia	6	10	16
Wilmington		4	4
Cherrystone		2	2
Total			41
Grand total			265

[a] None regularly.

The steamboat inspection boards were given the answers of the collectors of their districts, and asked "How many men, each with a fast motor boat, could patrol the waters of your district and see that motor vessels comply with the rules and laws for safe navigation?" Their replies are:

District.	Boats.	Men.
Bangor	4	4
Portland	5	5
Boston	15	15
Providence	6	6
New London	4	4
New Haven	4	4
New York	2	6
Albany	3	3
Philadelphia	8	16
Total	51	

The New York and Philadelphia boards think that each boat should have two or three men. For years one man operating a motor boat has patrolled the waters around Staten Island and always given satisfaction to the supervisor of the harbor of New York. I therefore believe that 51 men, each operating a fast motor boat, could patrol the waters of the Second district with better results than could be obtained by 265 men on shore.

The steamboat inspectors were asked also "Supposing the Government decided to employ such men and boats from June 1 for four months, for what pay could good men and their boats be secured, the Government furnishing the gasoline?" The Portland and New Haven boards replied $6 a day, Boston $7, Providence and Bangor $7.50, and Philadelphia $10 to $12; the latter included the pay of two men. The other boards did *not* name any price for such work.

SUMMARY.

In the season of 1907 there have been approximately 28,000 motor boats operated in the Second district.

Of this number about 3,000 were passenger boats all the season, 2,500 passenger boats sometimes and fishing boats sometimes, 8,000 passenger boats sometimes and pleasure boats sometimes, 2,500 fishing boats at all times, and the remainder were, except a few freight boats, pleasure boats or yachts at all times.

The number of licensed operators is now 3,745, and more are being licensed daily.

The number of passengers carried may have been as many as 30,000,000 or as few as 8,000,000.

The average size of the motor passenger boats is probably 5 tons.

The operators of passenger boats consider 4 passengers per ton of boat an ordinary load. Many boats have received more passengers than could be prudently carried A number of cases are reported of their carrying 10 people to a ton and in one case 15 people per ton of boat were counted by a collector of customs.

It is generally agreed that four or five people per ton of boat is all that should be allowed.

The requirements as to life-preservers, side lights, and anchor lights were hardly observed at all at the beginning of the season, but a great improvement was observed before its close.

Most of the officers with whom I have discussed the motor-boat business have expressed their views as to its regulation, at least on their part of the coast, but I do not consider that any recommendations should be made by me at present, and certainly not be included in this report.

I feel that an apology is necessary for the length of this report, but not knowing exactly what data was desired, I have endeavored to cover all the more important features of the business.

I have given more details than I would have done had I not feared that a report which did not give the sources of information would hardly be credited.

Respectfully,

IRA HARRIS,
Supervising Inspector, Second District.

Hon. GEORGE UHLER,
Supervising Inspector-General, Washington, D. C.

PASSENGERS ON MOTOR VESSELS.

Under the present law there is no authority to restrict the number of passengers that may be carried on motor vessels other than steam, and for the purpose of correcting this condition I would recommend that section 4464, Revised Statutes, be amended to read as follows:

SEC. 4464. The inspectors shall state in every certificate of inspection granted to vessels carrying passengers, other than ferryboats, the number of passengers of each class that any such vessel has accommodations for and can carry with prudence and safety.

For the purpose of harmonizing with this proposed amendment, I would recommend that section 4465, Revised Statutes, be amended by eliminating the word "steamer" in the first line, and substituting therefor the word "vessel."

ENFORCEMENT OF THE LAW.

Some of the laws governing the administration of this Service are totally inadequate to meet the purposes of their enactment, and under their operation we have at times been confronted by legal and constitutional objections that would have entirely defeated their purpose had it not been that the laws were strained almost to the breaking point. In order that the present laws may be made adequate to accomplish the ends that are sought, they should be so amended that they will be susceptible of intelligent and comprehensive interpretation by those whose duty it is to administer them and invulnerable

to the attacks of those who are ever watching for a chance to expose their defects and weaknesses. Rigorous penalties for violations of the laws will do more to command respect for them than any humane sentiment that we may undertake to suggest, and it is earnestly hoped that these penalties may be made so drastic and their imposition so certain as to beget a wholesome fear of the consequences following indifference or disrespect of the law, and thus effectually put a stop to the practice of calculating the profits of a violation.

The discipline exercised by this office in its field has always been severe, and in some instances extreme, and whenever it has become known that inspectors or others have been guilty of laxity or incompetency, or have in any way compromised the dignity or efficiency of the Service, they have been removed. This policy will be continued, and every man in the Service will be required to do his full duty in strict accordance with the law and the necessities and demands of the Service without regard for any condition other than an honest, conscientious, and intelligent discharge of the responsibilities of his position.

CREW REQUIRED ON VESSELS.

The proper authority to carry out the objects and purposes of section 4463 of the Revised Statutes is a question that has been a source of much trouble and annoyance to the Service, and with the section in its present form it is practically impossible to compel vessels under the jurisdiction of this Service to carry a sufficient number of licensed officers and crew to insure safe navigation.

It has been held by the courts and decided by the Attorney-General that the Board of Supervising Inspectors has this authority, but that the Board can not delegate its authority to the local inspectors. It is an utter impossibility for the Board of Supervising Inspectors to specify the number and class of licensed officers and crew for each vessel that will insure the safety contemplated by the law. The local inspectors know the vessel, her service, and everything connected with her operation, and I have to again earnestly recommend that the law be so amended as to place this authority with them. It might be well to say here that in the first session of the Fifty-ninth Congress legislation looking to this consummation was introduced and passed the House. I therefore again recommend, as I have in previous reports, that section 4463, Revised Statutes, be amended to read as follows:

SEC. 4463. No vessel subject to the provisions of this title shall be navigated unless she shall have in her service such number or complement of licensed officers and crew as may, in the judgment of the local inspectors who inspect the vessel, be necessary for her safe navigation, and the local inspectors shall make in the certificate of inspection of the vessel an entry of the licensed officers and crew so required. But if any steamer carrying passengers on her voyage is deprived of the services of any licensed officer, without the consent, fault, or collusion of the master, owner, or any person interested in the vessel, the deficiency may be temporarily supplied until others licensed can be obtained.

CREATION OF NEW BOARDS OF LOCAL INSPECTORS.

The vessels in the Territory of Hawaii and the island of Porto Rico are now under the jurisdiction of this Service, but neither of these places has local inspectors, and it is necessary annually to detail a

board of local inspectors to perform the work of inspection and to examine and license officers. Within the past year it has been found necessary to make several emergency details to Honolulu for the purpose of meeting the demands of the Service, and while it has not been found necessary to send the inspectors to Porto Rico more than once a year there is no doubt that in the near future emergencies will rise that will require their presence oftener. In order that the requirements of the law may be fully carried out, I have to recommend strongly that the law be so amended as to authorize the establishment of boards of local inspectors at Honolulu, Hawaii, and San Juan, P. R., an arrangement that is not only important in carrying on the work of this Service, but absolutely necessary to meet the requirements of the United States law applying to foreign vessels.

BULKHEADS.

In order that the Board of Supervising Inspectors may provide sufficient bulkheads for seagoing and Great Lakes passenger steamers, I have to recommend that section 4490, Revised Statutes, be amended so as to provide efficiency and stability for such bulkheads, by authorizing the Board of Supervising Inspectors to determine the number, location, and strength of this important feature of construction. As the section reads at present, it permits bulkheads to reach to the main deck only, which deck in modern construction is quite often below the water line, and consequently the bulkhead is useless in case of collision or stranding. I trust Congress will realize the importance of this subject and enact such legislation as will correct this dangerous condition, and provide for safe construction.

MEETING OF THE BOARD OF SUPERVISING INSPECTORS.

During the year the Board of Supervising Inspectors held its regular annual meeting, at which various necessary amendments were made to the rules and regulations and several new rules formulated, all of which, having received your approval, are in effect with the force of law.

The executive committee was twice called in session by you for the purpose of testing life-saving appliances and making some amendments to the rules and regulations to meet apparent necessities. The work of the committee received your approval, and its conclusions are in force until ratified or rejected by the full Board.

DETAIL OF ASSISTANT INSPECTORS.

The temporary transfer during the year of assistant inspectors, which was effected under your direction, has produced good results, and it is gratifying to report that almost every day the wisdom of this move is made more apparent.

Your order providing for the several reinspections of passenger steamers of all classes was timely and has proven beyond doubt that this precaution was necessary to insure a sufficiency of life-saving equipment and to maintain it in serviceable condition, and the practice will be continued and reinspections made oftener if possible.

CONDITION OF THE SERVICE.

Since the first day of my connection with this Service I have endeavored by every possible means at my command to make it more effective and to widen the field of its usefulness, to the end that the object of its organization might be fully realized, and while we may congratulate ourselves upon a great advance in material, methods, and results, there is yet much to be accomplished. To this end I propose to give the Service in the future, as I always have in the past, my best thought and my most determined effort, and with the continued assistance of yourself we may reasonably hope to perfect a system second to none in the world. The Service is now in better condition than it has ever been in its history and is doing a splendid work in connection with the humane policy of its organization, but if we propose still further to extend its scope we must be relieved of the fetters of tradition and out-of-date laws that hinder rather than further our efforts. There can be no longer any doubt of its necessity as a life-saving factor, and its establishment must be strengthened by wise laws, intelligent rules and regulations.

CONCLUSION.

I beg to express my appreciation of the uniform kindness and courtesy extended me at all times by yourself and your corps of able assistants and to say that I shall endeavor always to merit its continuance.

There are attached hereto, for your information and for the information of Congress, the reports of the supervising inspectors of the various districts to the Supervising Inspector-General for the calendar year ended December 31, 1906; also a detailed list of foreign passenger steamers inspected during the fiscal year ended June 30, 1907.[a]

Respectfully,

GEO. UHLER,
Supervising Inspector-General.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

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[a] Lists of domestic vessels inspected during the year ended December 31, 1906, and of foreign steam vessels inspected during the fiscal year ended June 30, 1907, appear in the Annual Report of the Supervising Inspector-General, but have been omitted from this compilation.

The list of inspections of domestic vessels shows, by supervising and local districts, the class, name, and gross tonnage of each vessel inspected, when hull was built and rebuilt, when boilers were built and rebuilt, where vessel was built, date and place of inspection, and date and local district of previous inspection.

The list of foreign steam vessels inspected shows by headquarters of local inspectors the name, gross tonnage, nationality, and date of inspection of each vessel.

APPENDIX.

GENERAL STATISTICS.

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	First district.					
	San Francisco, Cal.	Portland, Oreg.	Seattle, Wash.	Juneau, Alaska.	St. Michael, Alaska.	Total.
Granted certificates of inspection:						
Domestic steam vessels	331	167	306	107	65	976
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	35	4	13	2	3	57
Domestic sail vessels, barges, etc	7	4	4	.....	1	16
Foreign steam vessels	11	.....	21	1	1	34
Total	384	175	344	110	70	1,083
Refused certificates of inspection:						
Domestic steam vessels	.....	1	.....	3	1	5
Gross tonnage of vessels inspected:						
Domestic steam vessels	286,893	34,483	161,557	4,110	29,231	516,274
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	3,681	193	677	45	267	4,863
Domestic sail vessels, barges, etc	7,459	6,260	4,327	.....	1,062	19,108
Foreign steam vessels	45,920	.....	116,123	75	5,217	167,335
Total	343,953	40,936	282,684	4,230	35,777	707,580
New vessels added to service	16	15	14	.....	1	46
Vessels gone out of service	8	6	6	7	6	33
Gross tonnage of new vessels added to service	9,130	3,422	2,365	.....	254	15,171
Gross tonnage of vessels gone out of service	4,772	756	4,390	99	1,161	11,178
Boilers inspected:						
Steel (riveted plates)	722	156	377	83	108	1,446
Iron (riveted plates)	39	8	18	2	.....	67
Pipe	51	10	117	26	3	207
Total	812	174	512	111	111	1,720
Boilers found defective:						
Gave way under hydrostatic pressure—						
Steel (riveted plates)	10	.....	6	.....	.....	16
Iron (riveted plates)	.....	.....	.....	.....	.....	.....
Pipe	.....	.....	1	1	.....	2
Defective from other causes—						
Steel (riveted plates)	31	.....	34	4	.....	69
Iron (riveted plates)	1	.....	2	.....	.....	3
Pipe	1	.....	1	1	.....	3
Boilers condemned from further use:						
Steel (riveted plates)	.....	.....	1	.....	.....	1
Iron (riveted plates)	1	.....	.....	.....	.....	1
Defects in boilers and attachments:						
Sheets	12	.....	5	.....	.....	17
Heads	.....	.....	1	.....	.....	1
Steam and mud drums	3	.....	.....	.....	.....	3
Flues and tubes	14	.....	2	.....	.....	16
Steam pipes	1	.....	2	.....	.....	3
Stay bolts	20	.....	15	.....	.....	35
Braces	15	.....	3	.....	.....	18
Other parts	17	.....	15	.....	.....	32
Tests of samples of steel and iron plates to be used in marine boilers, other than material tested at the mills by assistant inspectors:						
Samples of steel tested	13	1	.....	.....	.....	14
Samples of defective steel rejected	.....	.....	.....	.....	.....	.....

APPENDIX.

GENERAL STATISTICS.

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906.

Second district.									
New York, N. Y.	Boston, Mass.	Philadelphia, Pa.	New London, Conn.	Albany, N. Y.	Portland, Me.	Providence, R. I	Bangor, Me.	New Haven, Conn.	Total.
1,279	256	329	98	179	114	189	91	103	2,638
23	11	15	12	.....	3	5	4	10	83
17	2	.....	.....	2	.....	.....	.....	.....	21
203	40	14	.....	1	5	.....	2	.....	265
1,522	309	358	110	182	122	194	97	113	3,007
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
672,119	84,277	182,330	34,424	46,108	20,654	78,295	7,665	15,405	1,141,277
738	1,162	1,169	924	.....	178	122	2,148	431	6,872
6,948	909	.....	.....	515	.....	.....	.....	.....	8,372
1, 453,417	330,534	98,388	.....	1,811	41,642	.....	491	.....	1,926,283
2, 133,222	416,882	281,877	35,358	48,434	62,474	78,417	10,304	15,836	3,082,804
46	16	49	6	8	3	3	4	5	140
3	2	2	1	5	3	2	.....	4	22
213,670	8,575	37,466	1,310	3,406	161	281	2,245	530	267,644
1,242	20	490	17	768	125	6,402	.....	310	9,374
2,616	289	418	116	193	125	220	62	78	4,117
257	45	79	7	46	6	18	3	13	474
273	71	72	39	11	31	58	33	28	616
3,146	405	569	162	250	162	296	98	119	5,207
11	5	.....	.....	1	.....	1	.....	1	19
2	1	1	.....	1	.....	3	.....	.....	8
.....	.....	.....	.....	.....	.....	1	.....	.....	1
113	27	56	8	32	6	6	7	34	289
29	7	24	.....	4	.....	1	1	4	70
1	.....	6	2	.....	.....	2	.....	1	12
.....	4	.....	.....	.....	.....	.....	.....	.....	4
.....	1	1	.....	3	.....	.....	.....	.....	5
157	15	30	4	31	.....	7	4	27	275
10	2	3	.....	.....	.....	1	.....	.....	16
.....	.....	3	1	1	.....	.....	.....	.....	5
806	104	5	5	352	4	.....	2	13	1,291
.....	.....	6	.....	1	.....	.....	1	.....	8
424	53	15	1	385	29	9	.....	8	924
.....	3	4	.....	64	.....	5	2	3	81
27	5	68	.....	.....	.....	6	.....	12	118
13	2	.....	.....	.....	.....	.....	.....	.....	15
2	.....	.....	.....	.....	.....	.....	.....	.....	2

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	First district.					
	San Francisco, Cal.	Portland, Oreg.	Seattle, Wash.	Juneau, Alaska.	St. Michael, Alaska.	Total.
Tests of samples of line-carrying guns:						
Samples tested	.....	.....	.....	.....	.....	.....
Samples rejected	.....	.....	.....	.....	.....	.....
Received original license:						
Masters of steam and other motor vessels	3	2	18	.....	1	24
Masters and pilots of steam and other motor vessels	3	8	27	.....	.....	38
Mates of steam vessels	35	19	51	1	4	110
Mates and pilots of steam vessels	.....	.....	20	.....	.....	20
Pilots of steam and other motor vessels	19	18	19	6	.....	62
Joint pilots and engineers of steam vessels	1	1	8	1	.....	11
Engineers of steam and other motor vessels	127	46	128	8	7	316
Operators of motor vessels	290	200	448	.....	41	979
Masters of sail vessels and barges	6	1	15	3	.....	25
Chief mates of sail vessels and barges	5	.....	10	.....	.....	15
Total	489	295	744	19	53	1,600
Received renewal of license:						
Masters of steam and other motor vessels	32	2	24	.....	2	60
Masters and pilots of steam and other motor vessels	105	4	29	2	3	143
Mates of steam vessels	77	2	18	1	1	99
Mates and pilots of steam vessels	7	.....	5	1	.....	13
Pilots of steam and other motor vessels	10	8	17	13	1	49
Joint pilots and engineers of steam vessels	.....	.....	.....	3	.....	3
Engineers of steam and other motor vessels	266	21	56	8	4	35[illegible]5
Masters of sail vessels and barges	50	1	22	.....	1	7[illegible]4
Chief mates of sail vessels and barges	5	.....	8	.....	.....	1[illegible]3
Total	552	38	179	28	12	8[illegible]09
Licenses suspended or revoked:						
Masters of steam and other motor vessels	5	4	3	.....	.....	12
Masters and pilots of steam and other motor vessels	19	1	8	.....	.....	28
Mates of steam vessels	19	.....	.....	.....	.....	19
Pilots of steam and other motor vessels	1	1	2	.....	.....	4
Engineers of steam and other motor vessels	4	2	4	4	.....	14
Operators of motor vessels	.....	.....	.....	.....	.....	.....
Masters of sail vessels and barges	11	.....	1	.....	.....	12
Chief mates of sail vessels and barges	9	.....	1	.....	.....	10
Total	68	8	19	4	.....	99
Refused license:						
Masters of steam and other motor vessels	.....	.....	.....	1	3	4
Masters and pilots of steam and other motor vessels	.....	.....	1	.....	.....	1
Mates of steam vessels	2	3	2	1	1	9
Pilots of steam and other motor vessels	1	.....	2	.....	.....	3
Engineers of steam and other motor vessels	3	.....	14	2	3	2[illegible]
Operators of motor vessels	.....	.....	.....	.....	.....	.....
Masters of sail vessels and barges	.....	.....	.....	.....	.....	.....
Chief mates of sail vessels and barges	.....	.....	.....	.....	1	1
Total	6	3	19	4	8	40

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Second district.									
New York, N. Y.	Boston, Mass.	Philadelphia, Pa.	New London, Conn.	Albany, N. Y.	Portland, Me.	Providence, R. I.	Bangor, Me.	New Haven, Conn.	Total.
138									138
40									40
19	12	5			1	3			40
8	42	4						5	59
47	36	27	1	8	2	2	5		128
7	3	1			4		1		16
161	37	15	14	5	18	21	7	13	291
	1	4		2	1	2			10
288	149	62	25	28	17	54	17	15	655
389	172	272	234	12	254	170	118	131	1,752
12	16				6			1	35
4	11	1			1				17
935	479	391	274	55	304	252	148	165	3,003
45	10	6		2	1				64
183	30	27	7	9	11	12	5	3	287
40	5	3			1	1			50
14	1	6							21
106	26	14	14	15	15	17	13	7	227
1	3		2		5	1		1	13
427	67	92	19	33	27	45	14	20	744
20	18	12	1		8	3		1	63
11	8				1				20
847	168	160	43	59	69	79	32	32	1,489
1									1
15		11	2			1		1	30
		1							1
5	1	3	1			1			11
1	2	3						1	7
1									1
23	3	18	3			2		2	51
4	1								5
1	1								2
8	1	7	1				1	1	19
8	3	4	1	1		1	2		20
22	5	14	7		1		2		51
5	1	3	5		4	2	1	1	22
1								1	2
2	2	1							5
51	14	29	14	1	5	3	6	3	126

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	First district.					
	San Francisco, Cal.	Portland, Oreg.	Seattle, Wash.	Juneau, Alaska.	St. Michael, Alaska.	Total.
Violations of the law:						
Cases investigated by local boards	30	8	20	4	2	64
Cases dismissed by local boards	14	1	3	.....	2	20
Licenses suspended by local boards	23	6	11	3	.....	43
Licenses revoked by local boards	45	2	8	1	.....	56
Cases reported to district attorneys and chief officers of customs by local boards	1	1	2	.....	.....	4
Number of appeals to supervising inspector from decisions of local boards		3	3	2	.....	13
Decisions of local boards revoked by supervising inspector	.....	1	.....	.....	.....	1
Decisions of local boards modified by supervising inspector	3	2	2	1	.....	8
Decisions of local boards sustained by supervising inspector	2	.....	1	1	.....	4
Vessels wrecked or foundered:						
Steam vessels	4	.....	3	.....	1	8
Motor vessels	1	.....	.....	.....	.....	1
Sail vessels	2	.....	1	.....	.....	3
Barges, etc	.....	.....	.....	.....	.....	.....
Accidents to steam and other vessels:						
By collision between vessels	19	3	16	1	.....	39
By fire	3	.....	5	.....	.....	8
By sinking from any cause	3	.....	.....	.....	2	5
By grounding, temporarily or otherwise	8	.....	8	2	1	19
Damaged by snags, ice, collisions with wharves and bridges, or other cause	.....	2	3	.....	1	6
By explosion or accidental escape of steam	1	.....	.....	.....	.....	1
To machinery	4	3	2	2	.....	11
Miscellaneous	5	.....	4	.....	.....	9
Accidents causing loss of life by explosion or accidental escape of steam	1	.....	.....	.....	.....	1
Lives lost:						
By explosion or accidental escape of steam	1	.....	.....	.....	.....	1
By wreck or founder	2	.....	134	.....	.....	136
By collision between vessels	2	1	40	.....	.....	43
By fire	.....	.....	.....	.....	.....	.....
By accidental drowning	11	3	1	.....	.....	15
From miscellaneous causes	2	2	1	.....	.....	5
Passengers lost:						
By wreck or founder	.....	.....	92	.....	.....	92
By collision between vessels	.....	.....	34	.....	.....	34
By accidental drowning	1	1	.....	.....	.....	2
From miscellaneous causes	.....	.....	1	.....	.....	1
Lives saved by means of life-saving appliances required by law	88	.....	160	.....	.....	248
Passengers carried by steamers	35,482,941	2,318,850	3,170,452	66,841	105,360	41,144,444
Amount of property lost:						
By explosion	$100	.....	.....	.....	.....	$100
By wreck or founder	$311,200	.....	$343,000	.....	$3,000	$657,200
By collision between vessels	$57,593	$6,900	$20,400	$150	.....	$85,043
By fire	$350	.....	$42,000	.....	.....	$42,350
By snags	.....	$3,100	$400	.....	.....	$3,500
From miscellaneous causes	$764,850	$1,300	$16,750	$205	$35,000	$818,105
Total	$1,134,093	$11,300	$422,550	$355	$38,000	$1,606,298

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Second district.									
New York, N. Y.	Boston, Mass.	Philadelphia, Pa.	New London, Conn.	Albany, N. Y.	Portland, Me.	Providence, R. I.	Bangor, Me.	New Haven, Conn.	Total.
53	8	24	10	1	.....	6	1	4	107
32	.....	11	8	1	.....	.....	1	3	56
21	1	17	3	.....	.....	2	.....	2	46
2	2	1	.....	.....	.....	.....	.....	.....	5
11	3	9	1	.....	.....	.....	1	1	26
11	.....	6	.....	.....	.....	.....	.....	.....	17
2	.....	1	.....	.....	.....	.....	.....	.....	3
2	.....	4	.....	.....	.....	.....	.....	.....	6
1	.....	1	.....	.....	.....	.....	.....	.....	2
.....	2	2	1	.....	.....	.....	1	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	2	.....	.....	.....	.....	2	5
152	5	20	4	2	3	6	2	3	197
12	2	4	.....	4	3	1	.....	4	30
3	1	7	.....	1	.....	.....	.....	1	13
4	1	3	1	1	1	.....	3	.....	14
5	1	7	.....	1	.....	.....	.....	.....	14
5	.....	1	.....	.....	.....	2	.....	.....	8
.....	.....	6	1	.....	1	3	1	2	14
.....	.....	.....	.....	1	.....	1	.....	.....	2
1	.....	1	.....	.....	.....	2	.....	.....	4
5	.....	1	.....	.....	.....	3	.....	.....	9
.....	3	.....	3	.....	.....	.....	.....	.....	6
5	.....	.....	.....	2	.....	.....	3	.....	10
.....	.....	.....	.....	.....	.....	1	.....	.....	1
16	3	3	3	3	2	.....	.....	.....	30
8	1	2	2	.....	.....	1	.....	2	16
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	2	2	.....	.....	.....	.....	5
6	.....	2	2	.....	.....	1	.....	.....	11
2	.....	.....	.....	.....	.....	.....	2	.....	4
575,838	17,665,329	32,228,294	1,335,745	3,840,186	2,372,900	2,785,293	804,230	743,999	275,351,814
$2,000	.....	.....	.....	.....	.....	$10	.....	.....	$2,010
$80,000	$41,200	.....	.....	.....	.....	.....	$60,000	.....	$121,200
$69,600	$5,075	.....	$350	$180,000	.....	$250,140	.....	$5,200	$510,865
$29,000	$600	.....	.....	$5,650	$2,050	$1,250,000	.....	$2,750	$1,279,950
$1,800	$75	.....	.....	.....	.....	.....	.....	.....	$1,875
.....	$286	.....	$20,000	$350	$1,010	$6,100	$550	$1,150	$29,445
$112,400	$47,135	.....	$20,850	$186,000	$3,060	$1,506,250	$60,550	$9,100	$1,945,345

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Third district.					
	Norfolk, Va.	Baltimore, Md.	Charleston, S. C.	Savannah, Ga.	Jacksonville, Fla.	Total.
Granted certificates of inspection:						
Domestic steam vessels	255	294	101	74	71	795
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	8	17	2	4	5	3
Domestic sail vessels, barges, etc	1					1
Foreign steam vessels		16				1
Total	264	327	103	78	76	84
Refused certificates of inspection:						
Domestic steam vessels		1				
Domestic vessels propelled by gas, fluid, naphtha, or electric motors						
Total		1				
Gross tonnage of vessels inspected:						
Domestic steam vessels	78,606	105,160	7,779	39,347	8,814	239,7
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	237	949	41	98	194	1,5 19
Domestic sail vessels, barges, etc	126					1 126
Foreign steam vessels		86,159				86,1 159
Total	78,969	192,268	7,820	39,445	9,008	327, 510
New vessels added to service	8	14	2	3	6	33
Vessels gone out of service	2	4	18		1	25
Gross tonnage of new vessels added to service	9,401	3,338	101	827	966	14 633
Gross tonnage of vessels gone out of service	320	829	1,099		4	2 252
Boilers inspected:						
Steel (riveted plates)	284	504	91	98	62	1 ,039
Iron (riveted plates)	28	46	6	7	2	89
Pipe	14	22	11	7	13	67
Total	326	572	108	112	77	,195
Boilers found defective:						
Gave way under hydrostatic pressure—						
Steel (riveted plates)		8	2	2	2	14
Iron (riveted plates)			2			2
Pipe			1			1
Defective from other causes—						
Steel (riveted plates)	168	29	7	17	16	237
Iron (riveted plates)	7	11	2			20
Pipe					2	2
Boilers condemned from further use:						
Steel (riveted plates)		20	1		1	22
Iron (riveted plates)		4				4
Pipe					2	2
Defects in boilers and attachments:						
Sheets	26	248	5	9	8	296
Heads		26	2	4		32
Steam and mud drums	2	2	1			5
Flues and tubes	1,052	738	634	320	403	3,147
Steam pipes	4	10	2		6	22
Stay bolts	146	1,150	4	20		1,320
Braces	1	76	1			78
Other parts	29					29
Tests of samples of steel and iron plates to be used in marine boilers other than material tested at the mills by assistant inspectors:						
Samples of steel tested		10				10
Received original license:						
Masters of steam and other motor vessels		1		1		2
Masters and pilots of steam and other motor vessels		36	2	1		39
Mates of steam vessels	4	7		3		14
Mates and pilots of steam vessels		10				10
Pilots of steam and other motor vessels	35	56	21	10	4	126
Joint pilots and engineers of steam vessels	1	1	4		1	7
Engineers of steam and other motor vessels	51	110	30	34	29	254

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Fourth district.	Fifth district.			Sixth district.				
St. Louis, Mo.	Dubuque, Iowa.	Duluth, Minn.	Total.	Louisville, Ky.	Evansville, Ind.	Nashville, Tenn.	Memphis, Tenn.	Total.
109	73	190	263	50	62	73	76	261
11	10	6	16	5	3	1	2	11
.....	5	1	6	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
120	88	197	285	55	65	74	78	272
7	.....	1	1	.....	.....	.....	.....	.....
.....	1	.....	1	.....	.....	.....	.....	.....
7	1	1	2	.....	.....	.....	.....	.....
21,677	5,961	205,086	211,047	8,125	7,917	9,318	9,347	34,707
254	473	264	737	163	122	30	48	363
.....	803	192	995	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
21,931	7,237	205,542	212,779	8,288	8,039	9,348	9,395	35,070
11	7	7	14	9	1	1	3	14
6	6	3	9	3	6	6	7	22
410	558	21,274	21,832	1,079	88	41	129	1,337
2,025	396	158	554	70	224	255	760	1,309
248	91	198	289	136	131	139	124	530
4	4	13	17	.....	2	1	6	9
1	6	38	44	2	1	.....	2	5
253	101	249	350	138	134	140	132	544
4	4	6	10	.....	3	2	.....	5
.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	.....	.....	.....	.....	.....
63	12	3	15	28	29	21	65	143
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	2	6	.....	2	10
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
40	5	3	8	20	19	13	27	79
7	2	.....	2	1	4	6	5	16
7	5	1	6	4	9	13	9	35
15	126	.....	126	24	93	31	321	469
.....	2	1	3	.....	13	.....	3	16
.....	3	45	48	.....	17	9	.....	26
.....	4	1	5	.....	7	.....	.....	7
.....	11	.....	11	9	9	.....	2	20
.....	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....
.....	3	10	13	.....	1	3	1	5
10	4	1	5	.....	1	4	2	7
1	.....	.....	.....	.....	.....	.....	.....	.....
11	17	32	49	8	2	9	10	29
.....	.....	3	3	.....	.....	.....	.....	.....
31	12	20	32	14	6	15	10	45

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Third district.					
	Norfolk, Va.	Baltimore, Md.	Charleston, S. C.	Savannah, Ga.	Jacksonville, Fla.	Total.
Received original license—Continued.						
Operators of motor vessels	539	265	70	53	303	1,2[illegible]
Masters of sail vessels and barges		4		2		6
Total	630	490	127	104	337	1,6[illegible]8
Received renewal of license:						
Masters of steam and other motor vessels	2					2
Masters and pilots of steam and other motor vessels	32	24	1	3	6	66
Mates of steam vessels	3	1		1		5
Mates and pilots of steam vessels	2	3		1	1	7
Pilots of steam and other motor vessels	30	26	9	2	10	77
Joint pilots and engineers of steam vessels		2	3	2		7
Engineers of steam and other motor vessels	39	60	7	11	16	133
Masters of sail vessels and barges	4	5	1	3	2	15
Chief mates of sail vessels and barges		4	2	2		8
Total	112	125	23	25	35	320
Licenses suspended or revoked:						
Masters of steam and other motor vessels	2					2
Masters and pilots of steam and other motor vessels		2	2	2		6
Mates of steam vessels						
Pilots of steam and other motor vessels			1			1
Engineers of steam and other motor vessels	2	3	1	1	3	10
Chief mates of sail vessels and barges		1				1
Total	4	6	4	3	3	20
Refused license:						
Masters of steam and other motor vessels						
Mates of steam vessels		3				3
Pilots of steam and other motor vessels	8	6			4	18
Joint pilots and engineers of steam vessels			1			1
Engineers of steam and other motor vessels		2	2			4
Operators of motor vessels		2				2
Chief mates of sail vessels and barges			3			3
Total	8	13	6		4	31
Violations of the law:						
Cases investigated by local boards	13	10	10	6	2	41
Cases dismissed by local boards	10	4	6	3		23
Licenses suspended by local boards	4	6	3	2	2	17
Licenses revoked by local boards			1	1		2
Cases reported to district attorneys and chief officers of customs by local boards	1	2	1			4
Number of appeals to supervising inspector from decisions of local boards		1	1	1		3
Decisions of local boards revoked by supervising inspector		1				1
Decisions of local boards modified by supervising inspector	1					1
Decisions of local boards sustained by supervising inspector	17		1	1		19
Vessels wrecked or foundered:						
Steam vessels	2	1			1	4
Motor vessels	1					1
Accidents to steam and other vessels:						
By collision between vessels	20	9	3	2	2	36
By fire	3	2	2			7
By sinking from any cause	2	1	2	1	6	12
By grounding, temporarily or otherwise	2	1	1			4
Damaged by snags, ice, collisions with wharves and bridges, or other cause	4		1		6	11
By explosion or accidental escape of steam	1		1		2	4
To machinery	2				4	6
Miscellaneous	8					8

ELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN AGREED
ICTORS FOR THE YEAR ENDED DECEMBER 31, 1896—Continued.

urth rict.	Fifth district.			Sixth district.				
ouis, o.	Dubuque, Iowa.	Duluth, Minn.	Total.	Louisville, Ky.	Evansville, Ind.	Nashville, Tenn.	Memphis, Tenn.	Total.
63	128	48	176	32	113	44	48	237
118	164	114	278	54	123	75	71	323
4				2	2		2	6
4	3	7	10	3	2	1	5	11
6	2		2	3	1	4	3	11
12	9	9	18	4	7	3	9	23
	5	1	6					
14	13	13	26	4	5	3	18	30
40	32	30	62	16	17	11	37	81
1					1			1
2	2	2	4		3	1		4
						1		1
	1	2	3	3	1	5		9
3		1	1	1		4	1	6
6	3	5	8	4	5	11	1	21
	1		1					
1				2	2	1	1	6
1	1	2	3		2	2	3	7
4	3		3	1	3	2	5	11
1	2	2	4	1	5	1	2	9
7	7	4	11	4	12	6	11	33
7	2	4	6	5	7	5	3	20
3		3	3	2	4	1	2	9
4	2	1	3	2	3	8	1	14
2	1	4	5	2	2	3		7
3	2	1	3	3	1	2	2	8
	1	2	3	1	2			3
	1	1	2	1	1			2
		1	1		1			1
	3	1	4		3	1	1	5
1		6	6	1	2	1		4
	2	2	4	1		2	3	6
	1	4	5	3	3	1	2	9
		3	3					
	2	7	9		1	1	2	4
	1	1	2	3			3	6
		1	1					

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Third district.					
	Norfolk, Va.	Baltimore, Md.	Charleston, S. C.	Savannah, Ga.	Jacksonville, Fla.	Total.
Lives lost:						
By collision between vessels	1		3			4
By fire		5				5
By accidental drowning	2	3	9		3	17
From miscellaneous causes	2				3	5
Passengers lost:						
By accidental drowning			2		1	3
From miscellaneous causes						
Lives saved by means of life-saving appliances required by law	1					1
Passengers carried by steamers	5,964,799	3,702,873	616,782	450,685	538,738	11,273,877
Amount of property lost:						
By wreck or founder	$82,000	$1,000			$10,000	$93,000
By collision between vessels	$19,055	$25	$40,000			$59,080
By fire	$2,610	$2,925	$10,000			$15,535
By snags	$30	$75,500			$500	$76,030
From miscellaneous causes	$1,225					$1,225
Total	$104,920	$79,450	$50,000		$10,500	$244,870

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Fourth district.	Fifth district.			Sixth district.				
St. Louis, Mo.	Dubuque, Iowa.	Duluth, Minn.	Total.	Louisville, Ky.	Evansville, Ind.	Nashville, Tenn.	Memphis, Tenn.	Total.
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
3	2	2	4	2	3	1	9	15
.....	.....	3	3	.....	1	.....	1	2
.....	.....	.....	.....	.....	1	.....	2	3
2	.....	1	1	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
2,900,233	1,053,115	1,051,074	2,104,189	700,190	357,433	266,576	414,031	1,738,230
.....	$1,200	.....	$1,200	.....	$6,500	$2,000	$32,000	$40,500
$300	.....	$8,575	$8,575	$279	.....	$200	.....	$479
.....	$2,750	$8,000	$10,750	$10,100	.....	$3,500	$8,500	$22,100
.....	$21,000	$15,560	$36,560	$200	$3,000	$800	$1,500	$5,500
.....	$100	$17,150	$17,250	$4,300	.....	.....	$3,050	$7,350
$300	$25,050	$49,285	$74,335	$14,879	$9,500	$6,500	$45,050	$75,929

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Seventh district.			
	Cincinnati, Ohio.	Pittsburg, Pa.	Point Pleasant, W. Va.[a]	Total.
Granted certificates of inspection:				
Domestic steam vessels	65	152	75	292
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	1			1
Domestic sail vessels, barges, etc		1	1	2
Foreign steam vessels				
Total	66	153	76	295
Refused certificates of inspection:				
Domestic steam vessels	2			2
Gross tonnage of vessels inspected:				
Domestic steam vessels	13,804	29,215	7,848	50,867
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	25			25
Domestic sail vessels, barges, etc		115	152	267
Foreign steam vessels				
Total	13,829	29,330	8,000	51,159
New vessels added to service	2	1	8	11
Vessels gone out of service	1	2	6	9
Gross tonnage of new vessels added to service	275	643	847	1,765
Gross tonnage of vessels gone out of service	120	220	801	1,141
Boilers inspected:				
Steel (riveted plates)	157	456	153	766
Iron (riveted plates)	1	1		2
Pipe	4	22	2	28
Total	162	479	155	796
Boilers found defective:				
Gave way under hydrostatic pressure—				
Steel (riveted plates)				
Iron (riveted plates)				
Defective from other causes—				
Steel (riveted plates)	31	99	33	163
Iron (riveted plates)				
Defects in boilers and attachments:				
Sheets	32	107	15	154
Heads	1		4	5
Steam and mud drums	3	13	6	22
Flues and tubes	53	167	18	238
Steam pipes				
Stay bolts			2	2
Braces				
Other parts				
Tests of samples of steel and iron plates to be used in marine boilers, other than material tested at the mills by assistant inspectors:				
Samples of steel tested				
Samples of defective steel rejected				
Received original license:				
Masters of steam and other motor vessels	3		8	11
Masters and pilots of steam and other motor vessels				
Mates of steam vessels	7	8	4	19
Pilots of steam and other motor vessels	3	10	11	24
Joint pilots and engineers of steam vessels				
Engineers of steam and other motor vessels	4	14	12	30
Operators of motor vessels	48	8	123	179
Total	65	40	158	263
Received renewal of license:				
Masters of steam and other motor vessels	5	3	9	17
Masters and pilots of steam and other motor vessels	2	24	2	28
Mates of steam vessels	15	11	12	38
Pilots of steam and other motor vessels	9	4	11	24

[a] By act of Congress approved April 9, 1906, effective on and after May 1, 1906, the districts of Gallipolis, Ohio, and Wheeling, W. Va., were abolished, and the district of Point Pleasant, W. Va., was created. The transactions to May 1, 1906, in the Gallipolis and Wheeling districts are included in the reports of *the Point* Pleasant board.

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Eighth district.						
Detroit, Mich.	Chicago, Ill.	Grand Haven, Mich.	Marquette, Mich.	Milwaukee, Wis.	Port Huron, Mich.	Total.
126	210	157	91	239	136	959
1	7	1		3	2	14
	1		1			2
			8		5	13
127	218	158	100	242	143	988
	1	2				3
155,869	182,258	49,834	17,006	172,268	87,372	664,607
30	173	18		125	44	390
	438		148			586
			5,866		7,482	13,348
155,899	182,869	49,852	23,020	172,393	94,898	678,931
19	20	5	4	7	11	66
1	1	1	4	6	8	21
91,595	28,490	618	173	646	36,171	157,693
5	557	4	4,189	3,161	7,438	15,354
166	246	194	106	313	160	1,185
6	22	14	5	17	15	79
26	21	16	2	16	11	92
198	289	224	113	346	186	1,356
2	12		2	10		26
	2		1			3
	25	45	6	19	5	100
	5	6		3		14
	32	20	20	1	3	76
				2	1	3
	2	1	3	1		7
1	36	57	15	5	2	116
	2	3	8	2		15
1	30	30	146	10		217
	8	15	21			44
	1	17	4	15		37
				735		735
				61		61
	17	1		2		20
	2					2
8	29	9	10	20	35	111
	15	3		1	6	25
34	42	23	6	39	35	179
113	83	170	39	266	128	799
155	188	206	55	328	204	1,136
14	23	12	6	14	38	107
	1					1
15	17	15	12	22	50	131

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Third district.					
	Norfolk, Va.	Baltimore, Md.	Charleston, S. C.	Savannah, Ga.	Jacksonville, Fla.	Total.
Granted certificates of inspection:						
Domestic steam vessels	255	294	101	74	71	[illegible]95
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	8	17	2	4	5	36
Domestic sail vessels, barges, etc	1					1
Foreign steam vessels		16				16
Total	264	327	103	78	76	[illegible]848
Refused certificates of inspection:						
Domestic steam vessels		1				1
Domestic vessels propelled by gas, fluid, naphtha, or electric motors						
Total		1				1
Gross tonnage of vessels inspected:						
Domestic steam vessels	78,606	105,160	7,779	39,347	8,814	2[illegible],706
Domestic vessels propelled by gas, fluid, naphtha, or electric motors	237	949	41	98	194	1,519
Domestic sail vessels, barges, etc	126					126
Foreign steam vessels		86,159				86,159
Total	78,969	192,268	7,820	39,445	9,008	3[illegible]7,510
New vessels added to service	8	14	2	3	6	33
Vessels gone out of service	2	4	18		1	25
Gross tonnage of new vessels added to service	9,401	3,338	101	827	966	1[illegible],633
Gross tonnage of vessels gone out of service	320	829	1,099		4	2,252
Boilers inspected:						
Steel (riveted plates)	284	504	91	98	62	1,039
Iron (riveted plates)	28	46	6	7	2	89
Pipe	14	22	11	7	13	67
Total	326	572	108	112	77	1,195
Boilers found defective:						
Gave way under hydrostatic pressure—						
Steel (riveted plates)		8	2	2	2	14
Iron (riveted plates)			2			2
Pipe			1			1
Defective from other causes—						
Steel (riveted plates)	168	29	7	17	16	237
Iron (riveted plates)	7	11	2			20
Pipe					2	2
Boilers condemned from further use:						
Steel (riveted plates)		20	1		1	22
Iron (riveted plates)		4				4
Pipe					2	2
Defects in boilers and attachments:						
Sheets	26	248	5	9	8	296
Heads		26	2	4		32
Steam and mud drums	2	2	1			5
Flues and tubes	1,052	738	634	320	403	3,[illegible]147
Steam pipes	4	10	2		6	22
Stay bolts	146	1,150	4	20		1,[illegible]320
Braces	1	76	1			78
Other parts	29					29
Tests of samples of steel and iron plates to be used in marine boilers other than material tested at the mills by assistant inspectors:						
Samples of steel tested		10				1[illegible]0
Received original license:						
Masters of steam and other motor vessels		1		1		[illegible]
Masters and pilots of steam and other motor vessels		36	2	1		3[illegible]
Mates of steam vessels	4	7		3		1[illegible]
Mates and pilots of steam vessels		10				10
Pilots of steam and other motor vessels	35	56	21	10	4	126
Joint pilots and engineers of steam vessels	1	1	4		1	7
Engineers of steam and other motor vessels	51	110	30	34	29	254

VESSELS NAVIGATING UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Eighth district.						
Detroit, Mich.	Chicago, Ill.	Grand Haven, Mich.	Marquette, Mich.	Milwaukee, Wis.	Port Huron, Mich.	Total.
.....	1	2	2	.....	1	6
58	20	37	8	48	50	221
87	62	66	28	84	139	466
3	3	4	4	.....	8	22
.....	5	2	1	4	5	17
.....	2	.....	.....	1	.....	3
.....	.....	.....	.....	2	1	3
3	10	6	5	7	14	45
.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	5	5	11
.....	.....	.....	.....	.....	.....	.....
3	3	1	1	3	16	27
4	3	4	2	12	16	41
2	1	.....	1	2	3	9
10	7	5	4	22	40	88
6	13	13	11	5	10	58
2	7	8	3	.....	1	21
3	8	6	5	6	12	40
.....	2	.....	.....	1	2	5
17	6	2	1	1	10	37
.....	2	1	1	3	8	15
.....	.....	1	1	1	1	4
.....	.....	.....	.....	.....	6	6
.....	3	.....	.....	2	1	6
.....	1	1	2	.....	1	5
9	3	4	15	3	16	55
.....	4	2	.....	5	4	15
1	1	.....	4	.....	.....	6
10	1	8	18	6	5	48
.....	.....	4	7	.....	.....	11
.....	.....	.....	.....	.....	1	1
.....	8	4	4	4	2	22
.....	15	.....	1	4	5	25
.....	.....	.....	.....	1	.....	1
.....	.....	.....	.....	1	.....	1
2	5	2	1	2	1	13
.....	1	1	2	5	1	10
.....	.....	1	.....	.....	1	2
.....	2	1	.....	.....	.....	3
.....	15	.....	20	40	.....	75
7,403,154	1,818,194	770,536	478,515	484,691	549,097	11,504,187
.....	.....	.....	.....	.....	.....	.....
.....	$10,000	$500	$95,000	.....	$110,000	$215,500
$17,665	$105	$12,675	$66,150	$17,100	$287,000	$400,695
.....	$4,504	$1,100	.....	$166,200	$69,000	$240,804
.....	.....	$8,927	$1,150	.....	.....	$10,077
$53,000	$17,758	$19,975	$216,950	$85,975	$35,700	$429,358
$70,665	$32,367	$43,177	$379,250	$269,275	$501,700	$1,298,434

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Third district.					
	Norfolk, Va.	Baltimore, Md.	Charleston, S. C.	Savannah, Ga.	Jacksonville, Fla.	Total.
Received original license—Continued.						
Operators of motor vessels	539	265	70	53	303	1,230
Masters of sail vessels and barges	.....	4	.....	2	.....	[illegible]
Total	630	490	127	104	337	1,6[illegible]8
Received renewal of license:						
Masters of steam and other motor vessels	2	.....	.....	.....	.....	2
Masters and pilots of steam and other motor vessels	32	24	1	3	6	66
Mates of steam vessels	3	1	.....	1	.....	5
Mates and pilots of steam vessels	2	3	.....	1	1	7
Pilots of steam and other motor vessels	30	26	9	2	10	77
Joint pilots and engineers of steam vessels	.....	2	3	2	.....	7
Engineers of steam and other motor vessels	39	60	7	11	16	133
Masters of sail vessels and barges	4	5	1	3	2	15
Chief mates of sail vessels and barges	.....	4	2	2	.....	8
Total	112	125	23	25	35	320
Licenses suspended or revoked:						
Masters of steam and other motor vessels	2	.....	.....	.....	.....	2
Masters and pilots of steam and other motor vessels	.....	2	2	2	.....	6
Mates of steam vessels	.....	.....	.....	.....	.....	.....
Pilots of steam and other motor vessels	.....	.....	1	.....	.....	1
Engineers of steam and other motor vessels	2	3	1	1	3	10
Chief mates of sail vessels and barges	.....	1	.....	.....	.....	1
Total	4	6	4	3	3	20
Refused license:						
Masters of steam and other motor vessels	.....	.....	.....	.....	.....	.....
Mates of steam vessels	.....	3	.....	.....	.....	3
Pilots of steam and other motor vessels	8	6	.....	.....	4	18
Joint pilots and engineers of steam vessels	.....	.....	1	.....	.....	1
Engineers of steam and other motor vessels	.....	2	2	.....	.....	4
Operators of motor vessels	.....	2	.....	.....	.....	2
Chief mates of sail vessels and barges	.....	.....	3	.....	.....	3
Total	8	13	6	.....	4	31
Violations of the law:						
Cases investigated by local boards	13	10	10	6	2	41
Cases dismissed by local boards	10	4	6	3	.....	23
Licenses suspended by local boards	4	6	3	2	2	17
Licenses revoked by local boards	.....	.....	1	1	.....	2
Cases reported to district attorneys and chief officers of customs by local boards	1	2	1	.....	.....	4
Number of appeals to supervising inspector from decisions of local boards	.....	1	1	1	.....	3
Decisions of local boards revoked by supervising inspector	.....	1	.....	.....	.....	1
Decisions of local boards modified by supervising inspector	1	.....	.....	.....	.....	1
Decisions of local boards sustained by supervising inspector	17	.....	1	1	.....	19
Vessels wrecked or foundered:						
Steam vessels	2	1	.....	.....	1	4
Motor vessels	1	.....	.....	.....	.....	1
Accidents to steam and other vessels:						
By collision between vessels	20	9	3	2	2	36
By fire	3	2	2	.....	.....	7
By sinking from any cause	2	1	2	1	6	12
By grounding, temporarily or otherwise	2	1	1	.....	.....	4
Damaged by snags, ice, collisions with wharves and bridges, or other cause	4	.....	1	.....	6	11
By explosion or accidental escape of steam	1	.....	1	.....	2	4
To machinery	2	.....	.....	.....	4	6
Miscellaneous	8	.....	.....	.....	.....	8

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Ninth district.		Tenth district.				
Toledo, Ohio.	Total.	New Orleans, La.	Apalachicola, Fla.	Galveston, Tex.	Mobile, Ala.	Total.
	1				2	2
					1	1
94	934	513	336	288	201	1,338
		11		1	2	14
16	66	21	11	4	4	40
		5	3			8
		1		4		5
19	86	35	16	8	24	83
	4	2		2		4
9	92	44	25	26	24	119
			1		3	4
		1			1	2
44	248	120	56	45	58	279
	2	1			2	3
	4	3			1	4
	2	2			1	3
	1					
	9	6			4	10
1	4					
			1		1	2
6	15	4		1	5	10
4	30	10	7	3		20
					1	1
11	49	14	8	4	7	33
1	13	5	1		3	9
1	1	3	1		1	5
	9	4			3	7
		2			1	3
	3	9	1		4	14
	3			1	1	2
	1					
					1	1
	2			1		1
1	2	5			4	9
3	15	5	1	2	2	10
1	7	6		2	2	10
5	8	9	1			10
3	8					
3	5	6	1		2	9
	7	3				3
4	8	1				1
1	13	3	1	1		5
	3	3				3
	3	17				17
2	2	6				6
2	11	9	3	2	3	17
	5	4	2			6

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Ninth district.			
	Cleveland, Ohio.	Buffalo, N.Y.	Burlington, Vt.	Oswego, N.Y.
Received original license—Continued.				
Masters of sail vessels and barges		1		
Chief mates of sail vessels and barges				
Total	95	173	60	512
Received renewal of license:				
Masters of steam and other motor vessels				
Masters and pilots of steam and other motor vessels	24	15		11
Mates of steam vessels				
Mates and pilots of steam vessels				
Pilots of steam and other motor vessels	13	23	4	27
Joint pilots and engineers of steam vessels		1	3	
Engineers of steam and other motor vessels	25	34	10	14
Masters of sail vessels and barges				
Chief mates of sail vessels and barges				
Total	62	73	17	52
Licenses suspended or revoked:				
Masters and pilots of steam and other motor vessels			1	1
Pilots of steam and other motor vessels		2		2
Engineers of steam and other motor vessels	1		1	
Operators of motor vessels		1		
Total	1	3	2	3
Refused license:				
Masters and pilots of steam vessels		3		
Mates of steam vessels				
Pilots of steam and other motor vessels	6	2		1
Engineers of steam and other motor vessels	8	17		1
Operators of motor vessels				
Total	14	22		2
Violations of the law:				
Cases investigated by local boards	4	3	2	3
Cases dismissed by local boards				
Licenses suspended by local boards	1	3	2	3
Licenses revoked by local boards				
Cases reported to district attorneys and chief officers of customs by local boards	1	1		1
Number of appeals to supervising inspector from decisions of local boards		2		1
Decisions of local boards revoked by supervising inspector		1		
Decisions of local boards modified by supervising inspector				
Decisions of local boards sustained by supervising inspector		1		1
Vessels wrecked or foundered:				
Steam vessels				1
Accidents to steam and other vessels:				
By collision between vessels	7	5		
By fire	1	3		2
By sinking from any cause	1	2		
By grounding, temporarily or otherwise	1	2		2
Damaged by snags, ice, collisions with wharves and bridges, or other cause		1		1
By explosion or accidental escape of steam	5	1		1
To machinery	1	2		1
Miscellaneous	7	3		2
Accidents causing loss of life by explosion or accidental escape of steam	3			
Lives lost:				
By explosion or accidental escape of steam	3			
By wreck or founder				
By accidental drowning	7	2		
From miscellaneous causes	1	3		1

VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Fourth district.	Fifth district.			Sixth district.				
St. Louis, Mo.	Dubuque, Iowa.	Duluth, Minn.	Total.	Louisville, Ky.	Evansville, Ind.	Nashville, Tenn.	Memphis, Tenn.	Total.
3	2	2	4	2	3	1	9	15
		3	3		1		1	2
					1		2	3
2		1	1					
2, 900,233	1,053,115	1,051,074	2,104,189	700,190	357,433	266,576	414,031	1,738,230
	$1,200		$1,200		$6,500	$2,000	$32,000	$40,500
$300		$8,575	$8,575	$279		$200		$479
	$2,750	$8,000	$10,750	$10,100		$3,500	$8,500	$22,100
	$21,000	$15,560	$36,560	$200	$3,000	$800	$1,500	$5,500
	$100	$17,150	$17,250	$4,300			$3,050	$7,350
$300	$25,050	$49,285	$74,335	$14,879	$9,500	$6,500	$45,050	$75,929

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Ninth district.			
	Cleveland, Ohio.	Buffalo, N.Y.	Burlington, Vt.	Oswego, N.Y.
Passengers lost:				
By explosion or accidental escape of steam				
By accidental drowning	1			
From miscellaneous causes				
Passengers carried by steamers	805,340	895,549	186,710	480,014
Amount of property lost:				
By explosion				
By wreck or founder				$300
By collision between vessels	$1,400	$5,475		
By fire	$750	$6,000		$5,097
By snags				
From miscellaneous causes	$8,500	$16,430		$11,050
Total	$10,650	$27,905		$16,447

SSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED SPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

Ninth district.		Tenth district.				
'oledo, Ohio.	Total.	New Orleans, La.	Apalachicola, Fla.	Galveston, Tex.	Mobile, Ala.	Total.
.....	.....	1	.....	.....	.....	1
.....	1	.....	1	.....	.....	1
.....	.....	2	.....	.....	.....	2
1,565,056	3,932,669	4,030,718	164,716	56,992	175,388	4,427,814
.....	.....	$14,000	.....	.....	.....	$14,000
$25,000	$25,300	$32,000	.....	.....	$40,000	$72,000
$25	$6,900	$900	$1,200	$300	$50	$2,450
$200	$12,047	$47,500	.....	$2,450	$1,150	$51,100
.....	.....	$4,000	$1,750	.....	$350	$6,100
$8,200	$44,180	$25,400	.....	$1,500	.....	$26,900
$33,425	$88,427	$123,800	$2,950	$4,250	$41,550	$172,550

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO
UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING

	Ninth district.			
	Cleveland, Ohio.	Buffalo, N.Y.	Burlington, Vt.	Oswego, N.Y.
Passengers lost:				
By explosion or accidental escape of steam				
By accidental drowning	1			
From miscellaneous causes				
Passengers carried by steamers	805,340	895,549	186,710	480,014
Amount of property lost:				
By explosion				
By wreck or founder				$300
By collision between vessels	$1,400	$5,475		
By fire	$750	$6,000		$5,097
By snags				
From miscellaneous causes	$8,500	$16,430		$11,050
Total	$10,650	$27,905		$16,447

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

RECAPITULATION—Continued.

		Total in 1906.	Total in 1905.	Increase (+) or decrease (—).
OFFICERS.				
Received original license:				
Masters of steam and other motor vessels	94			
Masters and pilots of steam and other motor vessels	203			
Mates of steam vessels	319			
Mates and pilots of steam vessels	52			
Pilots of steam and other motor vessels	935			
Joint pilots and engineers of steam vessels	67			
Engineers of steam and other motor vessels	1,861			
Operators of motor vessels	7,048			
Masters of sail vessels and barges	69			
Chief mates of sail vessels and barges	33			
		10,681	3,167	+7,514
Received renewal of license:				
Masters of steam and other motor vessels	167			
Masters and pilots of steam and other motor vessels	762			
Mates of steam vessels	220			
Mates and pilots of steam vessels	46			
Pilots of steam and other motor vessels	730			
Joint pilots and engineers of steam vessels	44			
Engineers of steam and other motor vessels	1,794			
Masters of sail vessels and barges	156			
Chief mates of sail vessels and barges	43			
		3,962	3,902	+ 60
Licenses suspended or revoked:				
Masters of steam and other motor vessels	17			
Masters and pilots of steam and other motor vessels	109			
Mates of steam vessels	21			
Pilots of steam and other motor vessels	55			
Engineers of steam and other motor vessels	54			
Operators of motor vessels	5			
Masters of sail vessels and barges	12			
Chief mates of sail vessels and barges	11			
		284	331	— 47
Refused license:				
Masters of steam and other motor vessels	11			
Masters and pilots of steam and other motor vessels	19			
Mates of steam vessels	47			
Pilots of steam and other motor vessels	105			
Joint pilots and engineers of steam vessels	1			
Engineers of steam and other motor vessels	203			
Operators of motor vessels	48			
Masters of sail vessels and barges	2			
Chief mates of sail vessels and barges	9			
		445	313	+ 132
VIOLATIONS OF LAW.				
Violations of the law:				
Cases investigated by local boards		337	318	+ 19
Cases dismissed by local boards		142	90	+ 52
Licenses suspended by local boards		195	243	— 48
Licenses revoked by local boards		87	31	+ 56
Cases reported to district attorneys and chief officers of customs by local boards		103	174	— 71
Number of appeals to supervising inspector from decisions of local boards		65	65	.....
Decisions of local boards revoked by supervising inspector		14	13	+ 1
Decisions of local boards modified by supervising inspector		23	27	— 4
Decisions of local boards sustained by supervising inspector		41	24	+ 17
CASUALTIES—LOSS OF LIFE.				
Vessels wrecked or foundered:				
Steam vessels	45			
Motor vessels	2			
Sail vessels	3			
Barges, etc.	5			
		55	68	13

STATEMENT EMBRACING THE VARIOUS MATTERS AND OCCURRENCES RELATING TO VESSELS NAVIGATED UNDER THE ACTS OF CONGRESS THAT HAVE BEEN ACTED UPON BY THE SEVERAL BOARDS OF LOCAL AND SUPERVISING INSPECTORS FOR THE YEAR ENDED DECEMBER 31, 1906—Continued.

RECAPITULATION—Continued.

		Total in 1906.	Total in 1905.	Increase (+) or decrease (−).
CASUALTIES—LOSS OF LIFE—continued.				
Accidents to steam and other vessels:				
By collision between vessels	370			
By fire	91			
By sinking from any cause	72			
By grounding, temporarily or otherwise	97			
Damaged by snags, ice, collisions with wharves and bridges, or other cause	69			
By explosion or accidental escape of steam	25			
To machinery	74			
Miscellaneous	63			
		861	800	+ 61
Accidents causing loss of life by explosion or accidental escape of steam		13	4	+ 9
Lives lost:				
By explosion or accidental escape of steam	33			
By wreck or founder	150			
By collision between vessels	57			
By fire	6			
By accidental drowning	146			
From miscellaneous causes	54			
		446	349	+ 97
Passengers lost:				
By explosion or accidental escape of steam	1			
By wreck or founder	92			
By collision between vessels	34			
By accidental drowning	19			
From miscellaneous causes	20			
		166	45	+ 121
Lives saved by means of life-saving appliances required by law		328	575	− 247
PASSENGERS CARRIED.				
Passengers carried by steamers		357,794,491	330,235,959	+27,558,532
LOSS OF PROPERTY.				
Amount of property lost:				
By explosion	$56,110			
By wreck or founder	1,239,200			
By collision between vessels	1,077,187			
By fire	1,711,916			
By snags	139,642			
From miscellaneous causes	1,398,313			
		$5,622,368	$4,969,354	+ $653,014

SUMMARY OF CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS FOR THE YEAR ENDED DECEMBER 31, 1906.

FIRST SUPERVISING DISTRICT.

LOCAL DISTRICT OF SAN FRANCISCO, CAL.

January 6.—The freight steamer *Gualala* struck on Saunders reef, Cal. Case investigated, and license of M. Kalnin, master and pilot, was suspended, January 25, for 1 year, for reason of negligence, and that of Bernard Johnson, second mate, for 2 years for like reason. On February 6 Captain Kalnin appealed to the supervising inspector from the above decision of suspension, and on April 4 the suspension was modified to a period of 2 months and 15 days from and after January 25. On February 1 Mr. Johnson likewise appealed from the suspension of his license, to the supervising inspector, who, on April 3, modified the suspension of license to that of a period of 4 months from and after January 25.

January 11.—During a southeast gale, James McGuire, boatswain, steamer *State of California*, was washed overboard by heavy sea. Every possible effort was made to save him, but without success.

January 11.—The steamer *Dirigo*, in a heavy storm, off Northwest Seal rock, Cal., lost her rudderhead and sprung a leak. Part of her deck load was jettisoned and she was towed to San Francisco by the steamer *Shasta*. Loss of cargo, $1,000; repairs to vessel, $2,500. Case investigated and Captain C. S. Davis, master, was exonerated from blame.

January 11.—The bark *Challenger*, on her voyage from Killisnoo, Alaska, to Osaka, Japan, with cargo of fertilizer, took fire by spontaneous combustion on December 6, 1905. The fire got beyond control. The ship was sailed into Minabe Bay, Japan, and scuttled December 27. On January 11 the vessel was a total loss. The vessel was valued at $30,000 and the cargo at $60,000. Case investigated and A. C. Petersen exonerated.

January 12.—Steamer *W. H. Kruger* foundered at sea near Navarro, Cal. Case investigated, and John Norberg, master, exonerated form blame. Steamer was valued at $50,000 and cargo at $6,000.

January 12.—The dredge *San Francisco*, in tow of steamer *Sea Rover*, parted her hawser in a gale near Point Bonita, Cal., and drifted ashore. Damage to dredge unknown.

January 15.—The steamer *Brunswick* struck a reef while leaving the harbor of Fort Bragg, Cal., in a heavy southeast gale, and lost her rudder and rudderpost. Vessel was towed to San Francisco. Case investigated and master of steamer exonerated from blame. Estimated damage, $3,000.

January 15.—The steamer *Oakland*, while making a stop at her ferry slip, San Francisco, broke her crosshead. Estimated damage, $250.

January 25.—The steamer *Grace Dollar* and British bark *Pax* collided on Bay of San Francisco. Damage to steamer estimated at $2,000; to the *Pax*, $1,250. Investigation was begun on January 30 and postponed awaiting witnesses.

January 28.—The steamer *J. D. Peters* collided with the schooner *Alaska*, anchored in fairway, Bay of San Francisco. The bowsprit of schooner struck Robert Hanlon, a deck hand, and dragged him overboard. Prompt efforts were made to rescue him, but he could not be found. Case investigated and master of steamer was exonerated. Damage to the steamer, nominal; to schooner, about $200.

January 29.—The steamer *Arrow* collided with the steamer *Aurora*, Bay of San Francisco, in a dense fog. Case investigated and the masters of both steamers exonerated from blame. Damage to steamer *Aurora*, $1,000; to steamer *Arrow*, none.

February 4.—The steamer *Cabrillo* collided with stern of schooner *E. H. Watson*. Damage, about $150. Case investigated and license of Eugene O'Hara, assistant engineer, was suspended for a period of 10 days for error in answering signals to engine room.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SAN FRANCISCO, CAL.—Continued.

February 11.—On arrival of steamer *Texan* at Honolulu she took fire in her hold, where a quantity of shingles and lime was stowed. Fire was subsequently extinguished Damage to cargo not known.

February 20.—The steamer *Isleton* collided with the gasoline launch *Flyer*, 10 tons, on the Bay of San Francisco. The occupants of the launch were taken on board the *Isleton*, and the launch towed to Richmond flats. Damage unknown. Case investigated and the master and the pilot of the *Isleton* were exonerated.

March 5.—While discharging cargo and exhausting winches into auxiliary condenser, steamer *Enterprise*, the condenser burst and injured E. F. May, second assistant engineer, fatally. Case investigated and the officers of the steamer exonerated. Damage, about $100.

March 6.—Steamer *Encinal* collided with steamer *Water Nymph* in Oakland Creek, Cal., during a fog. Case investigated and the licenses of D. W. Billings, master, and B. F. Harvey, engineer, respectively, were suspended March 30, for 30 days, for negligence and unskillfulness.

March 9.—The steamer *Brooklyn*, while hauling out from Caspar, Cal., listed to port and lost part of her deck load, which carried away her mainmast. Damage estimated at $1,000.

March 11.—Thomas Doherty, first assistant engineer, steamer *Robert Dollar*, charged with intoxication on duty. Charge admitted by defendant and his license was suspended March 19, for 30 days.

March 31.—In the case of collision between gasoline boat *W. P. Fuller* and the rowboat of the barkentine *Arago*, October, 1905 (Annual Report, 1905) an investigation was held and the master of the *W. P. Fuller* was exonerated March 31.

March 31.—The steamer *Wasp* and the steamer *Angel* collided in Humboldt Bay, Cal. Case investigated at Eureka, Cal., and the license of John Wehman, master and pilot, steamer *Wasp*, was suspended August 11 for 10 days for negligence and unskillfulness.

March 31.—Steamer *Newsboy* was wrecked on Humboldt Bay bar, Cal. Steamer was valued at $20,000; and cargo, at $2,000. Case investigated and J. E. Johnson, master, exonerated.

March 31.—A child of Mr. Donovan, passenger, was lost overboard from the steamer *Santa Barbara* on voyage from Seattle to San Francisco. Case investigated, and F. B. Zaddart, master, was exonerated.

April 4.—F. Woodyard, steward, steamer *James S. Higgins*, fell overboard while the steamer was lying at her wharf at Fort Bragg, Cal., and drowned. Mr. Woodyard was intoxicated at the time.

April 17.—The bark *George Curtis* and schooner *Mindoro* collided at sea, latitude 36° 36′ N., longitude 123° 26′ W., causing the instant death of E. Downing, second mate of the *George Curtis*. Case investigated by the supervising inspector. License of E. C. Larsen, master of the *Mindoro* was suspended for 30 days for carelessness and negligence. Damage to *George Curtis*, $4,000; and to the *Mindoro*, about $700. Date of suspension, Oct. 3.

May 3.—Charles Polles, waiter, steamer *T. C. Walker*, was missed from on board. He was last seen at 4 a. m. under the influence of liquor, in his room. He is supposed to have fallen overboard and drowned. This occurred near Bouldin Island, Cal.

May 22.—Steamer *Carfloat No. 2* collided with the steamer *Fourth of July* at anchor, Bay of San Francisco. Schooner displayed no anchor lights. No damage to steamer; bowsprit of schooner broken.

May 26.—The steamer *Constance* struck on Castro rocks, Bay of San Francisco. Case investigated and the license of E. H. Nielsen, master and pilot, was suspended June 22, for 60 days, for negligence and unskillfulness. Damage to steamer, $1,500.

June 9.—Steamer *National City* charged with carrying insufficient crew, and violation of section 50, Rule V of the rules and regulations. Case investigated and complaint dismissed, July 10.

June 11.—The gasoline boat *Corinthian* was wrecked on Humboldt Bay bar, Cal. This vessel while crossing the bar shipped a succession of heavy seas, causing her to be completely disabled and unmanageable. She drifted to northward and went on the beach. Two seamen, O. Carlsen and A. McCarry, were drowned. Vessel was valued at $12,000; and her cargo, at $1,000.

June 13.—Steamer *Brunswick* charged with alleged violation of section 50, Rule V of the rules and regulations in regard to boat and fire drill. Case investigated and complaint dismissed, June 20.

June 15.—Steamer *Thomas L. Wand*, in a fog, stranded near Bolinas Bay, Cal., was gotten off June 16. Damage estimated at $5,000. Case investigated, and license of

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SAN FRANCISCO, CAL.—Continued.

W. D. Olsen, master, was suspended, June 19, for 6 months, as master and pilot for reason of negligence and unskillfulness. Captain Olsen appealed, July 18, to the supervising inspector, from above suspension, and the suspension of license in this case was modified October 3, to a period of 3 months and 15 days from June 19.

June 25.—Steamer *Thoroughfare* and U. S. steamer *Argonaut* collided in Oakland Creek. Damage estimated at $300. Case investigated. License of John Hickey and of George H. Enas each, as master and pilot, was suspended, June 25, for 5 days.

July 10.—Steamship *City of Para* grounded near Point Ano Nuevo, Cal. Case investigated and the license of Geo. W. Brown, master, was suspended August 2, for a period of 90 days for negligence and unskillfulness. Captain Brown, on August 4, appealed from above decision to the supervising inspector, who, on August 9, sustained the local inspector's action.

July 12.—Steamer *Transit* collided with her ferry slip at San Francisco. The pin holding the spring and catch on hooking-on lever had worked out, and when bell signal to stop was received, the engineer could not unhook engine. Case investigated and R. J. Campbell, chief engineer, exonerated from blame. Damage estimated at $2,500.

July 16.—Steamer *Chico* stranded at Shelter Cove, Cal., and became a total loss. She was valued at $25,000. No cargo. Case investigated, and the license of Matthew Martin, master, was suspended, November 28, for 4 months for reason of negligence, and that of James E. Denny (who was chief mate of the *Chico*), as master and pilot, for 4 months by reason of negligence.

July 27.—Mr. Joseph Zwang, fireman on the steamer *Prentiss*, fell into the after crank pit and was killed. The vessel was at sea off Point Arena, Cal.

July 28.—Steamer *Arizonan* lost her tail shaft at sea. Vessel made no water and completed the voyage. The accident was believed to have been caused by striking some obstruction.

August 2.—Steamer *Iaqua* cracked her main steam pipe at sea off Point Arena, Cal., and returned to San Francisco, Cal., for repairs.

August 5.—A fire broke out in the galley of steamer *Tahoe* at Tahoe, Cal., causing some damage to fixtures in galley and dining room. This occurred at midnight and all lights were extinguished, and is supposed to have been caused by a match being thrown through one of the portholes. Damage, $200.

August 11.—While the steamer *Dora* was discharging her cargo at Colusa, Cal., a deck hand named Joe Garcia either fell or walked overboard and was drowned. When he was missed, prompt efforts were made to find him, but without success.

August 14.—Steamers *Bay City* and *Tampico* collided in Bay of San Francisco, causing damage to the *Bay City* of about $300. Case investigated by the supervising inspector, who, on August 20, exonerated Captain Wm. Rogers of the *Bay City*. Captain R. D. Mackay of the steamer *Tampico* was acting at the time as pilot without license as such, and this violation of section 3448, Revised Statutes, was reported to the collector of customs at San Francisco.

August 17.—Steamer *Ada Warren* grounded and capsized at Hog Island, Sacramento River, Cal. Case investigated by the supervising inspector, who, on November 8, exonerated the master and pilot of the steamer.

August 17.—Mr. G. Scatina, a fireman of the steamer *Alvira*, came up from the fireroom and walked to the side of the steamer and put his hand over his stomach as if in pain or in a faint, and lunged overboard; a boat was immediately lowered and the steamer's searchlight, and those of 2 others in the vicinity were brought to bear on the scene without discovering Mr. Scatina. This occurred near Dickens Landing, Sacramento River, Cal.

August 20.—Steamship *Manchuria* stranded in the northeast end of the Island of Oahu, Hawaii. Case investigated and the license of Captain J. W. Sanders, master, was suspended, December 8, for 5 months, for reason of unskillfulness and negligence. Damage estimated at $500,000.

August 21.—The ferry steamer *San Francisco* collided with ferry slip No. 2, San Francisco.

August 28.—Steamer *Celia* stranded in a dense fog near Point Pinos, Cal. Case investigated by the supervising inspector, who, on September 22, suspended the license of Henry Nyman, master, for 4 months, from and after September 6, for negligence and unskillfulness. Steamer estimated to be worth $15,000; value of cargo, about $3,000.

August 31.—The U. S. army transport *Sheridan* struck on a reef at Barber's Point, Island of Oahu, Hawaii. Case investigated and the license of Thomas Peabody, master and pilot, was suspended for a period of 6 months.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SAN FRANCISCO, CAL.—Continued.

September 5.—The schooner *Aloha* in tow of steamer *Alert* collided with schooner *Katie Holmes*, Bay of San Francisco. Damage to the *Katie Holmes* about $1,000.

September 9.—Steamer *City of Topeka* touched shoal off Point Arena, Cal. Case investigated by supervising inspector, who, on September 14, suspended the license of Capt. James Carroll for 3 months for reason of negligence and unskillfulness.

September 10.—Slight collision occurred between the steamer *Relief* and the sloop yacht *Challenger*, Bay of San Francisco.

September 13.—A slight collision occurred between the steamer *St. Helena* and the sailing yacht *Minnetonka* at Vallejo, Cal.

September 15.—On voyage from Yokohama to San Francisco the steamship *Mongolia* went on a reef at Midway Island. She was subsequently gotton off and proceeded to her destination safely. This case was investigated by the local inspectors, who did not agree in their opinions in the case. The case was then taken up by the supervising inspector under the provision of section 4408, Revised Statutes. The supervising inspector rendered his decision in the case on November 28, suspending the license of Capt. W. P. S. Porter, master of the *Mongolia*, for a period of 6 months for unskillfulness and negligence.

In this case the local inspector of hulls rendered an opinion that the license of Captain Porter should be suspended for 6 months, and that of Andrew Martin, chief mate of the *Mongolia*, should likewise be suspended for 6 months. On the other hand, the local inspector of boilers rendered an opinion that Captain Porter should be exonerated from blame, and that the license of Andrew Martin should be suspended for 6 months. The license of Andrew Martin, chief mate, was accordingly suspended. The supervising inspector, in his decision of November 28, reversed the local inspectors' suspension of Andrew Martin's license and exonerated him from blame.

The damage to the steamer *Mongolia* from above casualty was estimated at about $200,000.

September 28.—Antonio Garcia, a deck hand on steamer *Dover*, accidentally stepped off the bow of the barge *Texas* at Colusa, Cal., and was carried by the current under the barge. A boat was promptly lowered but Mr. Garcia could not be found.

October 5.—The steamer *Shasta* stranded in a fog off Point Concepcion, Cal., and was abandoned as a total loss. She was valued at $100,000. No cargo. Case investigated, and the license of H. T. Hanson, master, was suspended, November 20, for a period of 12 months, for negligence and unskillfulness. Five days after the vessel stranded, John L. Clark, a seaman, was drowned by the swamping of a boat while attempting to land in the surf. Captain Hanson appealed from the above suspension of his license to the supervising inspector, who, on December 31, sustained the decision of the local inspectors.

October 10.—Edward Crangle, master of the gasoline boat *Chetco*, with 3 seamen, left that vessel in one of her boats to make a landing at San Vicente, Cal. When about 100 yards from shore a heavy sea capsized the boat and Captain Crangle was drowned.

October 11.—Steamer *Meteor* collided with steamer *Ada Warren* near Vallejo, Cal. Case to be investigated.

October 14.—Steamer *Scotia* grounded in a fog in Humboldt Bay, Cal., and broke her propellor. The *Scotia* was towed to San Francisco by the steamer *Vanguard*.

October 18.—The gasoline boat *Jessie Matson* caught fire at Oakland, Cal., from the ignition of some gasoline spilled on the deck. Damage, $150.

October 27.—The steamer *Eureka* collided with steamer *Prentiss* in a fog off Humboldt Bay bar, Cal. Damage slight.

October 28.—Carl Ellingsen, seaman on the gasoline boat *Confianza*, was drowned at Big River, Cal., by the capsizing of 1 of her boats when returning from shore to the vessel.

November 5.—Steamer *Thoroughfare* collided with the gasoline boat *Newark* in Oakland Creek, Cal. Case investigated and the license of L. Erdman, master and pilot of the *Thoroughfare*, and that of C. E. Jahnsen, master and pilot of the *Newark*, respectively, were suspended for 15 days each, for negligence. Damage to *Thoroughfare*, $150; to the *Newark*, about $200.

November 20.—Wm. Wright, master of the steamer *Solano*, charged with violation of section 6, Rule VII of the rules and regulations, relating to vestibule doors on trains crossing on ferry steamer *Solano*, between Port Costa and Benicia, on November 13. Case investigated and the license of Captain Wright revoked January 8. Captain Wright appealed to the supervising inspector, who, on January 22, 1907, modified the decision of the local inspectors to that of suspension of Captain Wright's license for a period of 20 days.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SAN FRANCISCO, CAL.—Continued.

November 26.—In trying to cross the bow of schooner (name unknown), the steamer *F. M. Smith* was driven by a strong tide and heavy northwest wind too close to clear the schooner. The hog posts and cylinder timber of the steamer were carried away. This occurred on the Bay of San Francisco, Cal.

November 30.—Steamer *Trilby*, loaded with brick, capsized during a heavy squall near Antioch, Cal. Vessel raised and placed on ways for repairs.

December 6.—R. H. Denmark, first assistant engineer, steamer *Eureka*, was missed from on board at midnight on the voyage from Eureka to San Francisco. He was relieved from watch at 6 p. m. and it is not known how he was lost overboard.

December 7.—The bark *Sea Witch* was water-logged and abandoned at sea, latitude 45° 11′ N., longitude 127° W. Value of vessel and cargo unknown.

December 11.—The gasoline boat *Rio Rey* was disabled in a heavy gale at sea near Point Reyes, Cal., and was taken in tow to San Francisco by the steamer *Columbia*.

December 18.—The ship *Clan McFarland*, in tow of steamer *Sea Lark*, collided with quarantine hull *Omaha*, at anchor off California City. The master of the *Sea Lark* reported but 1 riding light on the *Omaha* visible.

December 25.—On voyage from Crescent City for San Francisco, the steamer *Del Norte* struck a rock near Point Gorda, Cal., and put back to the port at Eureka, and was towed into the latter port in a water-logged condition by steamer *Svea* on December 26. Damage not known. Case investigated and license of H. T. Payne, master and pilot, suspended, January 29, 1907, for 3 months for negligence and unskillfulness.

December 31.—Steamer *Santa Fe*, while laid up for the night at her berth in San Diego, Cal., filled and sunk during a heavy gale of wind. No officer or crew were on board. The vessel was raised and sustained little damage.

December 31.—While crossing San Francisco Bay bar, the steamer *City of Panama* encountered high seas, which boarded her and raked her fore and aft, taking her deck cargo overboard and causing her life rafts on upper deck to break adrift. In efforts to secure the rafts the third officer, boatswain, and two seamen were carried overboard. A lifeboat was lowered and the castaways rescued, with the exception of 1 seaman named N. Acuna.

LOCAL DISTRICT OF PORTLAND, OREG.

January 15.—Upon an examination of the boiler of the steamer *Geo. W. Simons* the same was found to be in an unclean condition, and the license of William H. Rober, engineer in charge, suspended for 30 days from January 23, for not reporting the same.

January 16.—At 5.15 p. m., while crossing Columbia River bar, en route to Portland, Oreg., the high-pressure eccentric rod on steamer *Redonda* broke, causing the high-pressure cylinder head, liner and valve to carry away. No one injured. No damage to cargo. Estimated damage to machinery, $500.

January 17.—Charges having been preferred against Capt. Ernest Loll, master of the steamer *Samson*, investigation was held, January 17, and his license suspended for 12 months from January 17 for intoxication while acting as master of the steamer *Samson*.

February 8.—While making a landing at Curtis landing, Columbia River, Wash., the steamer *Dalles City* struck a rock and was beached in a sinking condition. No one injured. Estimated damage to steamer, $800; to cargo, $300. Investigation held March 3, and license of Edward Ellis, pilot, suspended for 30 days from March 3 for carelessness and negligence in the handling of the steamer *Dalles City* on February 8.

February 28.—En route down the Columbia River, steamship *Redonda* struck on St. Helens breakwater, through a misunderstanding of orders given to quartermaster by pilot. No one injured. Estimated damage to steamer, $2,000. No damage to cargo.

March 20.—At 1.30 p. m. steamers *Columbia* and *Despatch* collided at the mouth of the Willamette River. No damage to *Columbia*. Estimated damage to *Despatch*, $50. No one injured.

March 21.—Connecting rod on starboard engine steamer *T. J. Potter* broke, damaging starboard engine to the extent of $800. No one injured. No loss or damage to cargo.

March 30.—License of Milton H. Hartzell canceled for perjury. Case referred to U. S. district attorney at Portland, Oreg.

May 15.—At 3.15 a. m. Columbia River, Oreg., near Astoria, Oreg., steamship *Costa Rica* ran into a fishing boat containing 2 fishermen who were asleep; fishing boat was swamped and 1 of the fishermen was drowned, the other was rescued by a fishing boat near by.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—PORTLAND, OREG.—Continued.

May 17.—At 12.30 a. m. an unknown man jumped from the steamer *Chas. R. Spencer* while in Portland Harbor, and was drowned before assistance could reach him. Body not recovered.

June 8.—George R. Taylor, engineer of the steamer *Saretta*, was accidentally caught on a revolving shaft and killed shortly after the steamer left Newport, en route down the Pend d'Oreille River.

June 12.—Steamship *J. B. Stetson* and barkentine *Jane L. Stanford* collided off the mouth of the Columbia River. No one injured. Estimated damage to steamship *J. B. Stetson*, $500. Estimated damage to barkentine *Jane L. Stanford*, $5,000. Investigation held July 3, and license of S. Bonifield, master of the steamer *J. B. Stetson*, suspended for 1 year from July 6. License of William T. Tribble, first officer steamer *J. B. Stetson*, suspended for 6 months from July 6. Master barkentine *Jane L. Stanford* exonerated from all blame.

July 24.—Investigation was held as to the cause of the collision of the U. S. lighthouse tender *Heather* with the jetty at the mouth of the Columbia River, April 27, and the license of George Curtis, master steam vessels, first officer in charge of midwatch, revoked for carelessness and negligence.

September 7.—While steamer *Hassalo* was discharging freight at Stella, Wash., R. W. Ulrich, deck hand, accidentally fell overboard and was drowned.

September 15.—James Bradley, a passenger on the steamer *Lurline*, was drowned from steamer while en route from Astoria to Portland, Oreg. Cause, hour, or place of drowning not known. Body recovered September 24.

September 21.—While steamer *Altona* was loading shingles at Moores mill, in the mouth of the Cowlitz River, Frank Perkins, while trucking shingles, collided with another truck and was knocked overboard and drowned before assistance could reach him. Body recovered 2 hours later.

October 8.—While steamer *Telegraph* was en route from Portland to Astoria, and opposite St. Helens, Columbia River, Oreg., crank on port engine gave way on outward stroke, carrying away after cylinder head, pitman, crosshead, and piston. Estimated damage to engine, $500. No one injured.

November 22.—At 3.48 a. m., steamers *Cascades* and *Lurline* collided in fog, Columbia River, Oreg. Steamer *Lurline* sunk. No loss of life. Estimated damage to hull, steamer *Lurline*, $1,000; to cargo, $300. Estimated damage to hull, steamer *Cascades*, $50; no cargo. Investigation held November 26, 27, and 28 and license of Kane Olney, master and pilot, acting pilot on steamer *Lurline*, suspended for 30 days for a violation of rule 4, pilot rules and regulations. J. H. Barton, pilot, steamer *Cascades*, exonerated from all blame.

LOCAL DISTRICT OF SEATTLE, WASH.

1905.

December 20.—The steamer *Portland* stranded on Spire Island reef, southeastern Alaska. Damage about $20,000. Case investigated January 25, 1906, and officers exonerated.

1906.

January 2.—The steamer *Kingfisher* struck a submerged log or snag in Discovery Passage, British Columbia. The propeller blades were bent and shaft sprung, necessitating a new tail shaft. Damage about $400.

January 7.—The steamer *Oregon* struck a submerged reef in Ellamar Bay, Alaska. The ship received no damage.

January 11.—In the matter of the suspension of the license of Geo. G. Swan, chief engineer, for 1 year from December 21, 1905, Mr. Swan appealed to the supervising inspector, first district, January 11, who modified, on May 26, the decision of the local inspectors to suspension of appellant's license for the period of 6 months from December 21, 1905.

January 22.—While towing the ship *Wm. H. Macy*, near Dungeness, the tug *Wanderer* ran into a large log or spar, which lay across her stem, checking her headway. While attempting to clear the obstruction she was overtaken and run into by the ship and her mainmast carried away. The ship's jib boom was also carried away in the collision.

January 22.—The steamer *Valencia* stranded on Vancouver Island near midnight at a point some 22 miles NW. ¾ W., magnetic, from Tatoosh Island light. The weather was thick, with a heavy sea running. The ship broke up in about 36 hours,

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SEATTLE, WASH.—Continued.

and of her crew of 65 persons and 104 passengers, 42 crew and 92 passengers were lost. The navigating officers were lost with the vessel. Loss about $175,000. Investigation begun January 27 and was completed March 17. The loss of the *Valencia* appears to have been due to insufficient soundings and failure to interpret correctly the soundings taken and to the absence of adequate aids to navigation at the entrance to the Strait of Juan de Fuca and on the southwestern coast of Vancouver Island.

February 4.—While en route from Seattle to Yokohama, fire broke out among the cotton cargo on No. 3 starboard lower between deck of the steamer *Minnesota*, and was only extinguished by flooding the cargo. Damage to vessel $30,000.

February 14.—While docking at Smiths cove the steamer *Olympia* fouled the Japanese steamship *Shinano Maru*, doing some slight damage to both vessels. The accident was due to the strong current running across the entrance to the cove.

February 15.—While the tug *Wyadda* was towing the schooners *Soquel* and *Spokane*, they ran into a strong southeast wind and the tug was unable to make headway with the vessels; the *Spokane* let go the hawser, and before getting clear fouled the *Soquel*. Amount of damage not reported, but was apparently slight.

February 15.—An unknown vessel collided with the British bark *Cissie* in tow of the tug *Bahada*. No serious damage to the *Cissie*. Amount of damage to stranger unknown.

February 16.—The license of Joel P. Geer, master and pilot, canceled for reason that he is not a citizen of the United States.

March 10.—A slight collision occurred between the steamer *Falcon* and the steamer *Dorothy* on Lake Washington.

March 10.—The license of John McClements, master of steam vessels, and that of Isak G. Isakson, chief mate of sail vessels, were each canceled for reason of cancellation of naturalization papers

March 16.—The license of John Ellessen, master of steam vessels, canceled for reason that he is not a citizen of the United States.

March 27.—While crossing Grays Harbor bar, the steamer *Coaster* struck bottom, breaking rudderpost and losing rudder. Damage about $500.

April 7.—A slight collision occurred between the steamers *Falcon* and *Dorothy*, on Lake Washington. Investigated April 26, in connection with the collision between the same steamers on March 10. Decision, June 4, suspending the license of C. H. Munson, master and pilot of steamer *Falcon*, 60 days, for violation of articles 19 and 24 of pilot rules for inland waters of the Atlantic and Pacific coasts, and that of R. L. Smith, pilot in charge of steamer *Dorothy*, on March 10, 1906, 15 days for violation of article 21 of pilot rules. H. E. Tompkins was reported to the collector of customs for navigating the steamer *Dorothy* on April 7, 1906, without having his name indorsed upon her documents as master. Captain Munson appealed, June 8, to the supervising inspector, first district, who, on July 7, sustained the decision of the local inspectors.

April 15.—A collision occurred between the steamer *Melville Dollar* and the fishing schooner *Daisy* near Race rock, carrying away the schooner's head gear. Damage about $300.

April 20.—A slight collision occurred between the steamers *Burton* and *Vashon* near Dockton, Wash. Investigated, June 12 and 14. Decision, July 31, suspending the license of Z. B. Murry, master and pilot, 30 days for violation of rule 2, pilot rules, and that of C. E. Wiman, master and pilot, 30 days for unskillfulness and willful violation of Title LII, Revised Statutes, and violation of rule 2, pilot rules.

April 29.—While lying at the P. C. coal bunkers, Seattle, Wash., fire broke out in the boiler room of the steamer *Mary C.* The fire was extinguished by the city fire department. Damage about $1,000.

June 13.—The gas schooner *Argus* was partially burned at sea. The vessel was using gas distilled from crude oil; the fire started from an explosion or back fire from the gas-making retort. It appears from the evidence that the mechanism of the gas-making retort was defective. Amount of damage not known. Investigated, June 18 and 19, and the officers exonerated.

July 2.—While the steamer *Bellingham* was making a landing at Richardson and the spring line had been attached to the wharf and was being paid out through the chock, a little girl named Florence O'Brien, a passenger, ran forward quickly and was caught in a loop and drawn to the chock, cutting off both her legs below the knees, from the effects of which she died about 3 hours later. Investigated September 15, 17, and October 21, and no evidence of negligence on the part of the officers of the vessel was found.

July 23.—The steamers *Rapid Transit* and *Yellow Jacket* were in collision off Rocky Point, Camano Island, tearing off the stem of the *Rapid Transit* and crushing the

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SEATTLE, WASH.—Continued.

Yellow Jacket's guards and bulwarks. Case not investigated up to the close of the year for the reason that the officer in charge of the *Yellow Jacket* appears to have left the district.

July 24.—A slight collision occurred between the steamers *Fairhaven* and *State of Washington*. No damage was done. At a preliminary hearing of the case on November 11, it appearing that there was no willful violation of the rules, the case was dismissed.

August 6.—While lying at her wharf at Houghton, Wash., with fires drawn, fire broke out at about 10.45 p. m. on the steamer *Falcon*, 74 gross tons, and the vessel was burned to the water's edge. Loss about $8,000.

August 13.—A collision occurred between the steamer *Vashon* and the steamer *Burton*. No damage to either vessel. Investigated, August 21; decision, September 6, revoking the license of S. Y. Hall, master and pilot, for violation of rule 9, article 24 of pilot rules, and because of lack of knowledge of said pilot rules, and suspending the license of John Ferguson, master and pilot, 15 days, for unskillful navigation. S. Y. Hall appealed to the supervising inspector, first district, who, on December 29, modified the penalty imposed in his case to suspension of license for a period of 4 months from September 6, 1906.

August 21.—The steamer *Nemo*, 9 gross tons, burned this date, while lying at anchor off Point Jefferson. Loss about $3,000. Case to be investigated.

August 28.—The steamer *Ramona*, 1,061 gross tons, grounded near Point Wilson, during a thick fog. Case investigated and dismissed.

September 3.—While en route to Alaska the steamship *Al-ki*, 1,259 gross tons, struck a reef off False Bay, San Juan Island. Investigated September 29 and October 4, and the officers of the vessel exonerated from blame.

September 5.—Wm. A. Sturgis, engineer of the steamer *Grace Thurston*, charged with neglect of duty. Investigated, and license suspended, September 12 for 15 days.

September 11.—The steamship *Bertha*, 926 gross tons, struck a rock in Boulder Bay, Prince Williams Sound, Alaska. Keel and shoe slightly damaged.

September 13.—The steamship *Oregon*, 2,335 gross tons, stranded on Hinshinbrook Island, Alaska coast, at 11.10 p. m., the weather being dark with heavy rain squalls. At daylight 5 boats were loaded with passengers and crew and started for Nucheck, distant 9 miles. Before arriving there they were picked up by the U. S. light-house tender *Columbine*, which vessel then proceeded to the scene of the wreck and transferred the remaining passengers and crew. The vessel is a total loss; value about $150,000. Investigated October 2, 6, 8, 15, and 16, and the master of the *Oregon* exonerated from blame.

September 17.—Fred S. Westcott, charged with intoxication while employed as assistant engineer of steam tug *Wyadda*. Investigated, charges sustained, and license suspended for 30 days.

September 20.—The steamer *City of Seattle* grounded on Trial Island during a dense fog. Investigated, October 2 and 11, and the officers exonerated from blame.

September 21.—J. C. Ross, chief engineer of the steamer *Mizpah*, fell overboard and was drowned while the steamer was underway. His loss was not discovered for several minutes, when the steamer was put about and ran back, but did not succeed in finding him. He was subject to attacks of heart disease.

October 2.—The steamer *Santa Ana*, 1,250 gross tons, left Seattle October 1 bound for southeastern Alaska. She encountered a heavy gale of unusual severity and sprang a leak when about 50 miles off Cape Flattery. She put back for the sound, and when Clallam Bay was reached it was found necessary to beach her. After lightering part of the cargo she was taken to Seattle and placed in dry dock for examination and repairs. Damage about $14,000, the greater part of which was evidently sustained while on the beach at Clallam.

October 8.—While crossing Grays Harbor bar the steamer *Wasp* struck heavily and carried away her rudder.

October 9.—The steamer *W. H. Pringle* drifted onto a rock in Entiat Rapids, Columbia River, and became a total loss. Accident due to a broken shaft. Loss about $18,000. No loss of life.

October 11.—The license of Charles W. Stewart was suspended 30 days for negligence while acting as engineer in charge of the steamer *A. W. Sterrett*.

October 17.—M. H. Farley, chief engineer, charged with being intoxicated and unable to perform his duty as chief engineer of steamer *Camano* on October 9, admitted the charges, and his license was suspended for 15 days.

October 22.—The steamer *Samson*, 328 gross tons, struck Bell rocks, tearing away [illegible] and part of her keel. Damage about $250.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—SEATTLE, WASH.—Continued.

October 25.—The barkentine *Skagit*, 506 gross tons, went ashore in a fog near Clo-oose, Vancouver Island, and became a total loss. The master, Louis W. Rose, and the cook, Thomas Pinnock, were lost. The remainder of the crew succeeded in reaching the shore.

October 26.—While docking at pier 14, Seattle, Wash., the steamship *Mackinaw*, 2,578 gross tons, collided with the dock, puncturing a plate and breaking a frame. Accident due to a strong wind blowing at the time. Damage, about $1,200.

November 2.—The steamer *Signal*, 475 gross tons, from West Port, Wash., bound for San Francisco, Cal., encountered a heavy gale and sprang aleak, making it necessary to put back. Not being able to cross the Columbia River bar, the vessel made for Puget Sound, arriving at Port Townsend, Wash., on November 7, still in a leaky condition.

November 7.—The bark *James Nesmith*, in tow of 2 tugs, the *Wyadda* and *Dolphin*, collided with the U. S. steamship *Princeton*, at anchor off Port Townsend, near Marrowstone Point. The *Princeton's* jib boom was carried away and some other slight damage was received. Investigated December 3, decision December 29, suspending the license of Chris Nelson, master and pilot of steamer *Wyadda*, 10 days for negligence.

November 15.—While the steamer *Montara*, 2,562 gross tons, was attempting to land at the Centennial mill, Seattle, Wash., November 15, she missed her landing and fouled the U. S. Revenue cutter *Perry*, at anchor, carrying away her bowsprit and head gear. The *Montara* was slightly damaged. The accident was due to the strong current from the Duwamish River.

November 17.—The steamship *Eureka*, 2,122 gross tons, left San Francisco, Cal., bound for Puget Sound. She encountered heavy weather en route, and received considerable damage to deck beams and stanchions.

November 18.—The steamers *Dix* and *Jeanie*, 130 tons and 1,071 tons, gross, respectively, were in collision just outside of Seattle Harbor, resulting in the sinking of the *Dix* and the loss of 40 lives. *Dix* valued at $20,000. Investigated November 21, 22, 23, 24, 26, 27, 30, and December 3. Decision December 15, revoking the license of Percy Lermond, master and pilot, in command of the steamer *Dix*, for negligence.

November 22.—The steamer *Monticello*, 196 gross tons, and the steamer *Manette*, 125 gross tons, were in collision in Seattle Harbor, during a dense fog. Damage, about $100. To be investigated.

November 27.—The steamer *Monticello*, 198 gross tons, and the steamer *Kitsap*, 195 gross tons, were in collision near Poulsbo, Wash. Damage slight. Case investigated and dismissed.

November 27.—Scott E. McCausland, pilot in charge of steamer *Advance*, charged with having left the pilot house of said steamer in charge of a deck hand while the vessel was under way. Investigated December 5, charges sustained, and license suspended for 20 days.

December 6.—The steamship *Olympia*, 2,837 gross tons, on her way from Everett, Wash., to San Francisco, Cal., met with severe weather, accompanied with a very high sea, the waves at times breaking clear over her, smashing her lifeboats and doing other damage about the decks, and partially filling the fireroom and engine room. Being unable to keep the water down with the pumps, the ship returned to port.

December 17.—The steamer *Waialeale* broke her crank shaft while making a landing at Tacoma, Wash. Damage, about $700.

LOCAL DISTRICT OF JUNEAU, ALASKA.

1905.

December 22.—While steamer *Kaiulani* was discharging cargo at Honohina landing, Hawaii, one of the surf boats was struck by 3 heavy swells, riding the first 2, but was swamped by the third and became unmanageable. Two of the men in the boat jumped overboard. Another boat came to their assistance and picked up one of them, but the other, a South Sea islander, Antone by name, was drowned. Boat searched for half an hour, but body could not be found.

1906.

January 26.—Steamer *Carita*, in Tongas Narrows, southeastern Alaska, Lewis reef, struck reef at extreme low tide. Night very dark and stormy. Floated on second high tide thereafter. No lives lost, and no damage done to steamer. No investigation.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—JUNEAU, ALASKA—Continued.

April 13.—At 1 p.m., steamer *Georgia*, at Rodman Bay, Alaska, broke crank shaft in after web of low-pressure crank, with engine working one-half speed ahead after backing away from the wharf. Estimated damage $1,200. Case not investigated.

April 21.—Steamer *Chilkat*, J. W. Hyvarnien, master, latitude 58° 48′ N., longitude 138° 48′ W., while towing Steamer *Pacific* from Prince William Sound to Pyramid Harbor, Alaska, lost all the blades off propeller. Damage $124. No investigation.

April 25.—Steamer *Pacific* (uninspected vessel), D. R. Carrol, master, while off Lituaya Bay, Alaska, in tow steamer *Chilikat*, which vessel became disabled, got steam on the *Pacific* to render assistance, boiler tubes gave out. Damage, $70. No investigation.

May 14.—Steamer *Dolphin*, John Johnson, master, while off west end of Douglas Island, Stephens passage, Alaska, broke tail shaft, starboard engine. Vessel was stopped and sling put on broken shaft. Vessel proceeded under her port engine, making 11 knots. Estimate of damage, $2,000. Ship allowed to proceed to Seattle for repairs. No investigation.

May 21.—Affidavit of Herman Bernhardt, Shungnak, Alaska, January 23, 1906, states loss of his engineer's license in the wreck of the steamer *John Reilly*, October 18, 1905. Letter requesting him to report details to the St. Michaels board, together with certificate of lost license, forwarded to-day.

May 22.—Steamer *Thistle* sunk at her moorings, Juneau, Alaska, Condition of this vessel personally observed by this board on the evening of May 21, 1906. Vessel raised, machinery taken out, and vessel dismantled. Amount of damage unknown. No investigation.

May 29.—Steamer *Alpha*, while en route between Juneau and Icy Straits, Alaska, furnace collapsed in same section previously been put up, inspected and passed for 150 pounds in Seattle district. This defect noticed at annual inspection, May 8, 1906. Upon examination, this date, ordered furnace put up, and pressure reduced to 125 pounds per square inch. Estimate of damage, $80. No investigation.

May 30.—Steamer *Georgia*, at Juneau, Alaska, while warming up the engine this a. m., main throttle casting broke below the valve. No injury to any person. Examination, this date, found the iron steam pipe, as originally built, short six-eighths of an inch in length of 11 feet 8 inches (hot). Ordered pipe lengthened to align up and throttle repaired. Estimate of damage, $50. No investigation.

June 10.—Steamer *Miami*, John A. Horgen, master, in Kvichak River, Alaska, grounded on a falling tide and swung across current with scow alongside. Flood tide swung steamer again, twisting keel off. Vessel filled at once. Crew escaped on lighter. Estimated, total loss, $1,000. No investigation.

June 11.—Steamer *Spokane*, while docking at Ketchikan, Alaska, collided with gasoline vessel *Pacific*. No lives lost. Damage, $150. No investigation.

June 15.—Steamer *Odiak*, A. England, master, Eyak, Alaska. Violation of section 4438, Revised Statutes, April 20, 1906, to June 12, 1906. John C. Hanson, employed as engineer, was not a licensed marine engineer, or a citizen of the United States, consequently not eligible for examination for license. Vessel operated by a railroad company with headquarters at Eyak, Alaska, called the Copper River Railroad Company. No investigation.

June 15.—Steamer *S. B. Mathews*, John Johnson, master, Eyak, Alaska. Violation of section 4417, Revised Statutes. Last inspected as an inland towing and fishing vessel May, 1903, verbally reported as carrying passengers for hire from steamship anchorage to shore, Eyak, Alaska. Vessel operated by Copper River Railroad Co., Eyak, Alaska. No investigation.

June 15.—On or about said date, steamer *S. B. Mathews*, near Eyak, Alaska, while attempting to plug a tube under pressure, rod parted. Engineer seriously scalded one arm. After treatment at a local hospital he returned to Seattle without making report to this board. Wm. Boyden, chief engineer. No investigation.

June 23.—Steamer *Uncle Sam*, Cooks inlet, Alaska, Ben Sweesy, acting master, Anton Bergseth, acting engineer; P. Welch & Co., Seward, Alaska, owners. Violation of section 4438, Revised Statutes. Steamer operated from April to October, 1905, without a licensed engineer, and from April to June 2, 1906, without either licensed master, pilot, mate, or engineer on board. The acting engineer has been on the boat since her arrival in 1904, having come up from Puget Sound on her as fireman. He holds a stationary engineer's license, No. 1010, from city of Seattle, issued December 5, 1905. Claims he was in Seattle all winter, but too busy to take examination for marine license.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—JUNEAU, ALASKA—Continued.

June 24.—Steamer *Lizzie*, Kodiak Island, Alaska, without licensed officers, and navigated under expired certificate of inspection. Owners desirous of inspection. Not inspected owing to fact that inspectors have not visited that portion of the district since expiration of certificate of inspection. Chrisian Anderson could not be licensed as pilot, having forgotten to bring his citizenship papers.

June 28.—Steamer *Karluk*, J. P. Olsen, acting engineer, Uganuk, Alaska. Violation of section 4438, Revised Statutes. J. P. Olsen, a licensed marine engineer, acting as engineer in charge steamer *Karluk*, of 13 gross tons. No investigation.

June 28.—Steamer *Karluk*, Uganuk Bay, Kodiak Island, Alaska, ran without a licensed pilot and on an expired certificate of inspection. Adolph Bendixen in charge without being a full citizen of the United States. Vessel unable to procure certificate of inspection at this time. To-day's inspection certificate may possibly be returned in August, 1906. Violation of section 4438, Revised Statutes.

June 29.—Steamer *Kamishak*, Karluk, Alaska, ran without licensed master or pilot; also on expired certificate of inspection. Anders E. Lindkoist in charge, licensed as second mate of ocean coastwise steam vessels.

June 29.—Steamer *Tugidak*, Karluk, Alaska. Violation of section 4438, Revised Statutes. Vincent Maher, licensed as special marine engineer, high pressure, 10 gross tons and under, acted as engineer-in-charge steamer *Tugidak*, of 22 gross tons, fitted with compound condensing engines. No investigation.

June 29.—Steamer *Uganuk*, Red River anchorage, Kodiak Island, Alaska. Violation of sections 4438 and 4453, Revised Statutes. Charles Osterberg, in charge, licensed as second mate, Pacific Ocean coastwise steam vessels. The certificate of inspection of this vessel may possibly be returned in August, 1906.

July 12.—Steamer *Bina*, Seward, Alaska, violated sections 4438 and 4453, Revised Statutes, by operating without licensed officers and without any inspection certificate. Deputy collector of customs at Seward, Alaska, reported this vessel as having been operated. On inspectors' visit they found vessel short of equipment and boiler record incomplete.

July 12.—Steamer *Annie*, Valdez, Alaska. Fred Liljgren, deputy collector of customs, reported that this vessel carried persons other than crew without any permit from the supervising inspector.

July 20.—Axel Fast, chief engineer steamer *S. B. Mathews*, Eyak, Alaska, violated section 4446, Revised Statutes. Refused to pay fine for same. Upon receipt of notice from deputy collector of customs at Valdez, this board revoked the license of Axel Fast. License surrendered to collector of customs and delivered to this board September 10, 1906. No investigation.

July 25.—Steamer *Florence*, Gastinau channel, Alaska, Robert Walkley, chief engineer, broke crank shaft. Crank shaft in low-pressure pin was repaired by drilling through the crank webs and pin, heating crank and driving 2½-inch pin, afterwards riveting in. New crank shaft now on hand. Cost to repair, $105. No investigation.

July 27.—Steamer *Collis*, Ugashik River, Alaska. Violation of section 4438, Revised Statutes. Vessel operated without licensed engineer during June, July, 1906. No investigation.

July 28.—Steamer *Ugashik*, Ugashik River, Alaska. Violation of section 4438, Revised Statutes. Steamer of 21 gross tons with compound condensing engine. Operated by Emil Swanson, special engineer, 10 gross tons. License expired before acting as engineer of this steamer and served without renewal to date.

August 5.—Wm. C. Bryan, steamer *Herbert*, acted engineer-in-charge, Koggiung, Kvichak River, Alaska, during June, July, and August, 1906, in violation of section 20, Rule V, rules and regulations. Wm. C. Bryant, licensed as second assistant, ocean, from San Francisco, Cal., November 2, 1904, acted as engineer-in-charge without indorsement. Employment contracted in San Francisco, Cal., where accessible to inspectors for indorsement.

August 7.—Steamer *Fram*, Nak Nek roadstead and Kvichak River, Alaska. Violation of section 4438, Revised Statutes. Operated prior to arrival of inspectors during June, July, and August, 1906, without licensed master, pilot, mate, or engineer. No investigation, merely inquiry by verbal questions.

August 14.—Steamer *Polar Bear*, Nushagak River, Alaska. Violation of section 20, Rule V, rules and regulations. Charles Brenning, acted as engineer-in-charge on license as third assistant engineer, ocean, indorsed as first assistant engineer, steamer *Gertie Storey*, 73 gross tons, March 29, 1904. No indorsement as engineer-in-charge. Contracted employment at San Francisco, Cal., where accessible to inspectors for indorsement. No investigation.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—JUNEAU, ALASKA—Continued.

September 1.—Steamer *Rustler*, Frank Joslin, chief engineer, broke crank shaft off Turnabout Island, Alaska. Steamer proceeded under temporary repairs arriving at Juneau. Shrunk a band around broken crank web. Estimate of repairs, $50. No investigation.

September 2.—Steamer *Uncle Sam*, Cooks inlet, Alaska, Ben Sweesy, master. Violation of section 4438, Revised Statutes. Came into Seldovia from Sunrise without a licensed marine engineer. Since reporting this vessel for a similar offense June 23, 1906, B. Sweesy has obtained second-class pilot's license from the Seattle board. Has operated the steamer since obtaining his license without a licensed engineer, although there has been one unemployed at Seldovia all summer. Case came under our personal observation. No investigation.

September 17.—Steamer *Challenge*, west coast of Prince of Wales Island, Wm. Taylor, chief engineer. Furnace collapsed. Accident reported by letter. From verbal inquiry of Mr. Taylor and personal examination of boiler November 23, 1906, suspended license of Wm. Taylor for 90 days.

September 21.—Steamer *Leader*, Martin Mansen, master, Nak Nek River, Alaska. Violation of section 4453, Revised Statutes, from June 14 to August 3, 1906. Steamer ran without current certificate of inspection, inspectors not having reached that port on an earlier date. Vessel was built at Nak Nek, Alaska, in 1901; estimated 25 gross tons. On August 3, 1906, they had just received the certificate of inspection granted June 14, 1905.

September 21.—Steamer *Fram*, John A. Horgen, master, Nak Nek roadstead, Alaska. Violation of section 4453, Revised Statutes. Steamer ran without a current certificate of inspection, inspectors not having reached that port at an earlier date; running without official documents; vessel unmeasured, estimated 22 gross tons. Built at Nak Nek, Alaska, in 1899. Ole Siverton admitted, on August 7, 1906, having run steamer *Fram* during season 1906 without a license. Vessel not granted certificate of inspection. General condition poor. Time of violation, June 17 to August 7, 1906.

September 21.—Steamer *Sayak*, Rudolph Buchert, master, Koggiung, Kvichak River, Alaska. Violation of section 4453, Revised Statutes, from June 18 to August 5, 1906. Steamer ran without current certificate of inspection, inspectors not having reached that port at an earlier date. Vessel without official documents and unmeasured. Vessel was built in 1900 at Koggiung, Alaska.

September 21.—Steamer *Herbert* Nils C. Justersen, master, Koggiung, Alaska. Violation of section 4453, Revised Statutes, from June 18 to August 5, 1906. Steamer ran without current certificate of inspection, inspectors not having reached that port at an earlier date. Vessel running without official documents and unmeasured. Vessel was built at San Francisco, Cal., estimated 12 gross tons.

September 21.—Steamer *Lillian*, Hans P. Jensen, master, Koggiung, Alaska. Violation of section 4453, Revised Statutes, from June 18 to August 6, 1906. Steamer ran without current certificate of inspection, inspectors not having reached that port at an earlier date; and without official documents.

September 21.—Steamer *Togiak*, Gustaf Carlson, master, Chogiung, Alaska. Violation of section 4453, Revised Statutes, from June 19 to August 11, 1906. Vessel ran without current certificate of inspection, inspectors not having reached port at an earlier date.

September 21.—Steamer *Tyone*, H. P. Nicholson, master, Chogiung, Nushagak River, Alaska. Violation of section 4453, Revised Statutes, from June 19 to August 11, 1906. Vessel running without current certificate of inspection, inspectors not having reached that port at an earlier date. No official documents. Vessel built at San Francisco, Cal., estimated 14 gross tons.

September 21.—Steamer *May*, Charles Burke, master, Nushagak River, Alaska. Violation of section 4453, Revised Statutes, from June 20 to August 14, 1906. Vessel operating without current certificate of inspection, being unmeasured, estimated 20 gross tons, built in San Francisco, Cal., 1903.

September 21.—Steamer *Polar Bear*, Charles Alberts, master, Nushagak River, Alaska. Violation of section 4453, Revised Statutes, from June 20 to August 14, 1906. Vessel running without current certificate of inspection, inspectors not having reached that port at an earlier date.

September 21.—Steamer *Koggiung*, William Brown, master, Nushagak River, Alaska. Violation of section 4453, Revised Statutes, from June 20 to August 10, 1906. Vessel ran without current certificate of inspection, inspectors not having reached that port at an earlier date. No official documents on board. Vessel built at Alameda, Cal., in 1901. Certificate of inspection granted on June 20, 1905, not received.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIRST SUPERVISING DISTRICT—JUNEAU, ALASKA—Continued.

September 21.—Steamer *Onedia*, Nugashak River, Alaska. Violation of section 4453, Revised Statutes, from June 20 to August 10, 1906. Vessel ran without current certificate of inspection, inspectors not having reached that port at an earlier date; also ran without licensed master. Customs papers issued at San Francisco, Cal., April 14, 1905. Carl Hendrickson has run the *Onedia* from June 12 to August 10, 1906.

September 21.—Steamer *Rattler*, J. H. F. Steinfast, master, Nugashak River, Alaska. Violation of section 4453, Revised Statutes, from June 20 to August 10, 1906. Vessel ran without current certificate of inspection, inspectors not having reached that port at an earlier date. Vessel is unmeasured; estimated 4 gross tons. Certificate of inspection granted June 20, 1905, not received.

September 21.—Steamer *Reporter*, Ole S. Christensen, master, Cooks Inlet, Alaska. Violation of section 4453, Revised Statutes, from May 24, 1903. Vessel operated during fishing season of 1903, 1904, 1905, and 1906 until September 3, without current certificate of inspection. Steamer's enrollment not on board. Reported to be sent to San Francisco for a new one.

September 21.—Steamer *Santa Monica*, Frederick W. Shields, master, Koggiung, Alaska. Violation of section 4453, Revised Statutes, from June 27, 1904, to August 7, 1906, during fishing season. Running without current certificate of inspection and without current official documents. Vessel inaccessible during the year 1905 for inspection. Certificate of inspection withheld August 7, 1906.

September 24.—George H. Swanton, third assistant engineer, steamship *Dolphin*, reported as intoxicated between Ketchikan and Juneau, Alaska, and discharged for that reason. Report mailed September 25 and received September 27, 1906. Investigation commenced September 28 and continued by request of defendant. Investigation resumed October 5, 1906, and defendant found guilty as charged. Suspended his license for 30 days.

September 28.—Steamer *Sachem*, southeastern Alaska waters, August Malmstein, master. Violation of section 4453, Revised Statutes. August Malmstein reports on taking charge of the *Sachem* August 5, 1906, found certificate expired. Reported same to customs officials, received permission to run the boat until inspectors returned to home port.

November 17.—Steamer *Ella Rohlffs*, Richmond S. Dodge, chief engineer, Ketchikan, Alaska. Defective boiler tubes. Matter investigated at Ketchikan, Alaska, November 17, by request of owners for information as to cause of failure. Found the defect to be pitting of the tubes by galvanic action. Revoked the license of Richmond S. Dodge, chief engineer, for neglect of duty.

LOCAL DISTRICT OF ST. MICHAEL, ALASKA.

1905.

October 13.—Steamer *John Reilly* was totally wrecked off Cape Blossom, Kotzebue Sound. Estimated value of vessel, $3,000.

1906.

May 6.—Steamer *Rock Island*, while lying at wharf at Chena, Alaska, was caught in the ice and sunk. Repeated efforts were made by owners to raise the vessel, but without avail. Value of steamer estimated at $5,000. No cargo lost.

September 8.—Steamer *Kinau* grounded at Kahului on the Island of Maui, Hawaii. Local inspectors investigated the matter and found same to have been entirely unavoidable. Affidavit presented by the harbor master at Honolulu, who examined the ship's bottom, stating "The damage is slight and does not hurt the vessel."

September 19.—Steamer *Leah*, while proceeding down the Yukon River, Alaska, 40 miles below Kaltag, struck a sunken rock or snag and sunk. This accident occurred just as the long Arctic winter was commencing, and the vessel could not possibly be raised or removed from that position for at least 8 months, being filled with mud and ice-bound during that period. The owners therefore regarded her as a total loss as soon as informed of the accident. No loss of life reported. Value of vessel estimated at $35,000.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—Continued.

SECOND SUPERVISING DISTRICT.

LOCAL DISTRICT OF NEW YORK, N. Y.

January 2.—About 6.15 a. m., towing steamers *Jerome B. King* and *R. M. Waterman* collided in the Arthur Kill, N. Y., causing slight damage. No one hurt.

January 4.—About 8.25 a. m., ferry steamers *Binghamton* and *Passaic* collided in the North River, causing very slight damage to the *Binghamton* and tearing out cabin from amidships on the *Passaic*. One of the scrubbers and 1 passenger on the *Passaic* slightly injured. There was a thick fog at the time and ebb tide with wind southeast. No one hurt on the *Binghamton*. Investigated January 12 and 30. Decision, February 13. Case dismissed.

January 4.—About 6.20 a. m., while the tugboat *Ariosa* was coming in from the dumping grounds with 2 scows in tow, and a dense fog existing, she grounded on Romer shoal. The *Ariosa* sunk, and the scows were towed by another tug to Gowanus. No one hurt.

January 6.—About 8.30 a. m., ferry steamer *Steinway* and tugboat *Winnie* collided in the East River off Eighty-second street, causing no damage. The steamers just sagged together. No one hurt.

January 6.—About 6.40 a. m., ferry steamers *Whitehall* and *Bronx* collided off slip at Whitehall street, Battery, N. Y., causing very slight damage. No one hurt.

January 9.—About 4.29 p. m., while the steamship *City of Atlanta* was passing out in the swash channel, New York Harbor, she struck on a sunken wreck, causing the ship to careen to port and grind heavily on the obstruction. The vessel returned to dock for examination. Several plates found damaged. No leak. No one hurt.

January 12.—About 3.20 a. m., the steamship *Chesapeake* of Philadelphia struck an obstruction in the swash channel, New York Harbor, damaging 3 plates, which had to be renewed. No damage to cargo. Ship did not leak. No one hurt.

January 12.—About 5.50 p. m., towboats *Howard* and *Greenville* collided off pier 49 North River, causing very slight damage. No one hurt.

January 13.—About 4.15 p. m., while the tug *Eugene F. Moran* was towing 2 scows to the dumping grounds, and when off the outer fairway buoy in the south channel, 1 of the scows turned over without warning. The hawser was cut and the tug returned to where the scow sunk to rescue the man who was on the scow, but when she got there the man could not be found, and it was also discovered that the man on the other scow had disappeared.

January 15.—About 4.40 p. m., coal boat in tow of tug *Harlem River No. 1* collided in the Harlem River with car float in tow of tug *Transfer No. 8*, causing damage to the coal boat of about $200. No one hurt. No damage to car float.

January 16.—About 10.25 p. m., barge in tow of tug *Pencoyd* and scow in tow of tug *John K. Gilkinson* collided off Governors Island, New York Harbor, causing slight damage. No one hurt.

January 21.—About 9.55 p. m., ferry steamer *New Brunswick* collided in the North River, off Harsimus cove, Jersey City, with barge in tow of tug *Johnstown*, causing very slight damage. There was a thick fog at the time. No one hurt.

January 22.—About 8.15 p. m., while tugboat *Evelyn* was tied up for the night, at foot of Congress street, Brooklyn, N. Y., a slight fire occurred on board. Cause unknown. No one hurt. Damage very slight.

January 23.—About 2 a. m., while tugboat *B. S. Cronin* was tied up at foot of Twelfth street, Brooklyn, N. Y., fire broke out on board, burning pilot house and a little of the deck. Fire was put out by city fire department fireboat. No one hurt.

January 24.—About 6 p. m., scow in tow of tug *Bouker* collided off Thirty-eighth street, Brooklyn, N. Y., with tugboat *Towanda*, damaging the scow. No damage to tugboat. No one was hurt.

January 26.—While tug *H. B. Chamberlain* was proceeding to sea with dumpers in tow, the master of the tug noticed that 1 dumper did not have lights burning, and when he went back to tell the man on board the dumper to put up lights, he found that the dumper had capsized and the man in charge of the dumper was missing. The tugboat was then off Sandy Hook. Investigated February 21. Decision March 1; case dismissed.

January 28.—About 6.35 a. m., car float in tow of tugboat *Transfer No. 9*, and the Belgium steamship *Calderon* collided off the Battery, New York City, causing such damage to the car float that she sunk alongside Quartermaster's dock, Governors Island. No one injured.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

January 29.—About 1.10 a. m., car float in tow of tug *Robert Rogers* collided off Canastreet, North River, with scow in tow of tug *Harry G. Runkle*, causing slight damage. No one hurt.

February 2.—About 10.10 a. m., tugboats *Stella* and *Transit* collided off Morris Canal basin, North River, causing some damage to the *Stella*, but none to the *Transit*. No one injured.

February 3.—About 9.55 a. m., tugboats *Vigilant* and *Morgan* collided off Grand street, East River, causing damage to the steering gear of the *Morgan* and slight damage to the *Vigilant*. The *Vigilant* towed the *Morgan* to her pier. No one injured.

February 5.—About 11.30 p. m., float in tow of tug *Johnstown* collided off Delancy street, East River, with ferry steamer *Ohio*, causing some damage to the ferryboat but no damage to the float. No one hurt.

February 6.—About 8.30 p. m., ferryboats *New Brunswick* and *Scandinavia* collided in the North River, causing very slight damage. No one hurt.

February 6.—About 2.15 a. m., grain boat *Carey Bros.*, while being towed down the North River by tugboat *New York Central No. 20*, suddenly sunk. The master of the tug reports that "he felt no jar, and, so far as he knew, did not come in contact with any obstruction, and can not account for the sinking of the boat." She was loaded with 8,000 bushels of wheat. No one hurt.

February 8.—Decision rendered in the case of the grounding of the steamer *Westover* on December 24, 1905: investigated January 10, 1906. The license of B. W. Joy suspended for 90 days, and Pilot J. Merithew was reported to the collector of customs at New York and to the U. S. district attorney.

February 8.—About 6.40 a. m., ferry steamer *Brooklyn* collided in New York Harbor with scow in tow of tug *Henry S. Beard*, causing very slight damage. No one hurt.

February 8.—About 1.30 p. m., ferryboat *Annex 4* and tugboat *Suffern* collided off the Battery, New York City, causing very slight damage. No one hurt. Investigated February 19. Decision February 28. Thomas Shafer, pilot of ferryboat *Annex 4*, was reported to the collector of customs at New York for violation of section 4438, Revised Statutes, in that on February 8, 1906, he navigated said ferryboat, of 501 gross tons, while he held a license authorizing him to act as pilot of steam vessels of only 500 gross tons. Also for violation of article 25, Rule IX, of the pilot rules.

February 9.—About 7.40 p. m., ferry steamer *West Brooklyn* collided off Governors Island, New York Harbor, with tugboat *New York*, causing slight damage. No one hurt.

February 11.—About 3.40 p. m., ferryboat *Newark*, on her trip from New York to Jersey City, and in making for her slip at the latter place, struck the outer part of the rack (center pin) with her starboard bow, bounded off and hit the bow of the ferryboat *Chicago* with a glancing blow. The *Chicago* was laid up in slip out of commission. Damage slight. There were some persons on the *Newark* thrown down and injured, but none seriously. The ferry slips were filled with ice.

February 13.—While tugboat *Ganoga* was in the East River, the steering gear got jammed and the tug took a rank sheer to port and collided with covered barge *Easton*, lying at the foot of Twenty-first street, causing barge to break away from moorings. The tug towed barge to Third street, where she filled with water. No one on board barge. Slight damage to tug. No one hurt.

February 14.—About 7.20 a. m., while tugboat *Valvoline* was off Delaware and Hudson docks, North River, she collided with a submerged wreck, breaking shaft and doing other damage to machinery, but no damage to hull. No one hurt.

February 14.—On the 6 a. m. trip of ferry steamer *West Brooklyn* from New York to South Brooklyn, fire was discovered in the men's cabin under inboard seats. The pilot rang alarm and water was pouring on fire inside of 1 minute. Fire was extinguished with but little damage to vessel. No one hurt. Cause of fire unknown.

February 14.—Investigation into the collision between steamers *Mt. Desert* and *John Harlan* which took place on December 20, 1905. Decision, February 28. License of Neils Jansen, of the tug *John Harlan*, suspended for 30 days.

February 15.—At 3 p. m., while tug *Johnston* was maneuvering around pier 5, Brooklyn, a return bend in the feed water heater of the starboard boiler burst, and while a fireman was closing the valve connecting the heater with the heater, his arm was slightly burned. The accident was caused by the valve seat in the feed-water line coming off its stem and shutting off connections between the heater and the boiler. Boiler was not injured.

February 16.—About 3.30 a. m., ferry steamer *Maine* collided off Stanton street, East River, with canal boat in tow of tug *J. H. Williams*, causing some damage to the canal boat. No damage to the *Maine*. No one hurt.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

February 19.—About 5.30 p. m., car float in tow of tug *Wrestler* collided in the East River with ferryboat *Atlantic*, causing slight damage to the guard of the ferryboat, port side. No one hurt.

February 22.—About 5.10 p. m., ferry steamers *Baltimore* and *Rochester* had a very slight collision in the North River. They only touched each other, causing no damage No one hurt.

February 24.—About 11.30 a. m., car float in tow of tug *Transfer No. 18*, collided in Buttermilk channel, New York Harbor, with canal boat in tow of tug *Coleraine*, causing very slight damage. No one hurt.

February 28.—While tugboat *Narragansett* was making up tow at St. George, N. Y., at 3 a. m., there was a hole blown in the boiler in the side sheet near end of furnace along the fire line, and the escaping steam scalded the fireman, Patrick Finneran, about the hands and face. He was removed to the hospital. The accident was caused by the blowing out of a copper plug which had been put in to keep the boiler from leaking. Investigated March 10. Decision March 19; case dismissed.

March 2.—About 5.10 p. m., tugboat *Greenwich* collided off pier 10, North River, with float in tow of tug *White Ash*, causing slight damage. No one hurt.

March 5.—Investigation of case of Benjamin F. Klein, employed on steamer *Burlington*, not having sufficient experience to warrant the issuance of license as engineer. Decision, March 8; case dismissed.

March 6.—About 9.30 p. m., while tugboat *Slatington* was making landing at end of B dock, Lehigh Valley Railroad terminal, Jersey City, N. J., deck hand Clarence Demarest went on the pier to take a line and fell overboard from the pier and was drowned. His body was recovered.

March 8.—About 3.45 p. m., ferry steamer *Steinway* had a slight collision off Horn Hook, East River, with tugboat *Manhattan*, causing very slight damage. No one hurt.

March 9.—About 6.30 p. m., steamer *North Star*, while turning in the East River off pier 31, without headway and with the assistance of towboats preparatory to docking, was struck by car float in tow of tug *Gladiator*, causing some damage to the stem and bow plates of the *North Star*, but no damage to the car float. No one hurt.

March 11.—About 2 a. m., while tugboat *Carrie* was lying at Barnes Bros.' dock, Port Richmond, N. Y., she filled with water and sunk. The steamer was raised a couple of days afterwards. No one hurt.

March 15.—About 8.45 a. m., tugboats *Sterling* and *A. W. Smith* collided off pier 6, East River, causing very slight damage. No one hurt.

March 19.—About 1.10 a. m., while ferry steamer *Cincinnati* was on her trip from New York to Jersey City, a man, who was a passenger on board, jumped overboard and was drowned. His name not known.

March 19.—About 11.30 a. m., ferry steamers *Rochester* and *Passaic* collided off Hoboken, North River, causing very slight damage. There was a thick snowstorm at the time. No one hurt. Investigated March 27. Decision April 9; case dismissed.

March 24.—About 4 p. m., car float in tow of tug *Harry G. Runkle*, coming down the North River, and when off Pennsylvania Railroad ferry, Jersey City, filled with water and sunk. No one hurt. Investigated April 7, 1906. Decision April 23. No action taken against the license of the pilot in charge of the tug, but reported him to the collector of customs at New York for a possible violation of section 4450, Revised Statutes.

March 28.—About 7.45 a. m., ferry steamer *Pittsburg* collided off Hoboken, N. J., with the tugboat *Tacoma*, causing slight damage to the ferry steamer, and pushing the pilot house of the tugboat over, aft. No one hurt. The accident was caused by the quick water from the propellers of the steamship *Cedric* swinging the *Tacoma* around, and pointed her crossing the bow of the ferry steamer on the port hand, just opposite to what they had signaled her to do.

March 29.—During the night, while steam yacht *Theo* was lying at mooring place, foot of East One hundred and forty-second street, New York City, fire broke out from some unknown cause, and before it was extinguished it burned the pilot house, cabin, and deck. No one hurt.

March 30.—About 8.20 a. m. ferry steamer *Cranford* collided off Twenty-first street, North River, with sail lighter *Jennie*, in tow of tug *Evelyn*, causing damage to the *Jennie* of about $150. No damage to the tug and very slight damage to the ferryboat. No one hurt.

March 31.—About 5.15 p. m. the steamship *Denver* collided with the tug *Lehigh* off the tail end of West Bank, Lower New York Bay, resulting in damage to the stem

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

of the *Lehigh*. No one injured. Slight damage to the steamship. Both vessels going in the same direction, and tug was attempting to cross astern of the *Denver*.

April 1.—At 3 p. m., when between Fire Island and Barnegat, fireman Earnest Dick was missed from the steamship *Persia*. The master of the steamer reports that the ship was carefully searched, but no trace of the fireman could be found.

April 2.—About 10.30 a. m. towing steamers *T. L. Sturtevant* and *Sarah E. Easton* collided in the North River, off Communipaw coal dock, causing the *Sarah E. Easton* to sink soon afterwards. The *Sarah E. Easton* was bound down the river and had a lumber-laden boat lashed to her starboard side, while the *T. L. Sturtevant* was bound up the river. No one hurt. Investigated April 17. Decision May 1; case dismissed.

April 2.—At 8.30 a. m., while tugboat *Henry O'Brien* was bound up Newark Bay, a fire broke out on board, and although every effort was made to extinguish it fire gained such headway that steamer was beached on the flats. The steamer *Nanticoke* went to her assistance and extinguished the fire. Considerable damage to tug, but no persons injured. Cause of fire unknown.

April 3.—About 1 p. m. car float in tow of tug *Transfer No. 3* collided off Newtown Creek, East River, with canal boat in tow of tug *Transit*, causing slight damage. No one hurt.

April 4.—Towing steamer *Wm. S. Anderson* was reported to the collector of customs, New York, for navigating on an expired certificate of inspection between March 28 and April 3, 1906. Certificate of inspection expired on March 28. Vessel was inspected on April 3, at which time the master informed the inspector that the vessel had been in service since the expiration of the last certificate. Fined $25, which amount was paid on April 28.

April 6.—Steamship *Lewis Luckenbach* grounded at Point Arenas, Porto Rico, at about 3.20 p. m., remaining aground about 2 hours. At the time of grounding ship was proceeding out of the anchorage of Point Arenas. The sea was smooth, and no damage resulted. Survey of ship was held at Ponce, Porto Rico, and ship declared seaworthy. No one injured. Steamer was in charge of a local pilot when she grounded.

April 7.—About 7.20 a. m. ferryboat *Flushing* and car float in tow of tug *Transfer No. 5* collided in the East River off Thirty-fourth street, causing some damage to the car float, but no damage to the ferry steamer. No one hurt.

April 7.—About 10.40 a. m., while tugboat *Wm. Orr* was off Greenville, N. J., deck hand William Smith fell overboard and was drowned. The tugboat let loose from her tow and cruised around, but could not find deck hand. It was reported that he could not swim.

April 7.—About 12.50 p. m. ferry steamer *Columbia* collided off Wall street, East River, with tugboat *Nimrod*, causing very slight damage. No one hurt.

April 7.—About 11.45 a. m. ferry steamer *America* and tugboat *Thomas Tracy* collided in the East River, off Grand street, causing considerable damage to both steamers. No one injured.

April 8.—About 9.30 p. m. towboats *J. H. Williams* and *Robert A. Scott* came together off pier 8, East River, the port side of the bow of the *J. H. Williams* lapped alongside of the stern of the *Robert A. Scott*, and the *Robert A. Scott* careened over until she took in water, and she sunk in a few minutes. All the crew of the *Robert A. Scott* taken off safely by the *J. H. Williams*, with the exception of the engineer, Thomas Fallon, who was below decks and was drowned. Investigated May 7. Decision May 12. Reported to the collector of customs, New York, for violation of Article 27, pilot rules. Case was finally dismissed.

April 9.—About 10.25 p. m. ferry steamer *Jersey City* and tugboat *Charles H. Senff* collided in the North River, New York, causing very slight damage. It was stated in report that the steering gear of the tugboat got out of order. No one hurt.

April 11.—On the 5 p. m. trip of ferryboat *Cincinnati* from Desbrosses street, New York, to Jersey City, a man, a passenger on board, jumped overboard and was drowned. His name not known.

April 14.—At 12.15 p. m. the steamer *Burlington* while entering the Communipaw coal slip, North River, ran into the southeast corner of the coal dock, resulting from the steering gear becoming jammed. A strong southeast wind and flood tide forced her against the dock.

April 14.—About 5.35 p.m. the steamer *Mount Morris* and the ferryboat *Manhattan Beach* collided in the East River, causing some damage to both vessels. No one hurt. The ferryboat had just left her slip at Long Island City, and the steamer was proceeding up the river.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

April 15.—About 9.20 a. m. ferry steamers *Red Bank* and *Plainfield* collided in the North River, causing very slight damage. No one hurt. There was a thick fog at the time.

April 18.—At 8.30 p. m. (as reported by the pilot), while ferryboat *Ridgewood* was lying at dock A, Weehawken, N. J., in giving fire drill, signal was given to call crew to quarters, to man the lifeboat, and ordered deck hand James Travers in lifeboat, but as the boat was swung overboard the eye hook of the single block broke, and James Travers fell out of lifeboat on stringpiece of dock, causing injury. He was removed to hospital.

April 18.—At 1.40 a. m., while steam canal boat *City of Detroit* was lying at Baltimore and Ohio railroad dock, St. George, Staten Island, fire broke out on board and completely destroyed the vessel and her cargo. No lives lost.

April 18.—About 2.55 p. m. car float in tow of tug *Transfer No. 11* and steamship (German) *Werdenfels* collided off Negro Point, East River, damaging the car float badly and pushing 6 cars overboard. The float man, John Johnson, was knocked overboard, his nose broken, and some other injuries sustained. No other person hurt. The tug was bound east and the steamship bound west.

April 21.—Decision rendered in the case of complaint against Robert T. Skelton, that the experience shown on application for pilot's license granted him February 13, 1906, was incorrect. Investigated March 26 and 31, and April 4, 1906. Charges found sustained by the evidence, and said license was revoked. Case also reported to the collector of customs at New York and the U. S. district attorney.

April 24.—At 6.36 a. m. passenger steamers *Richard Peck* and *Providence* came together off Thirty-fourth street, East River, causing some damage to the *Richard Peck*, but no damage to the *Providence*. There was a very thick fog at the time of the collision, and the *Providence* had just come to anchor. The *Richard Peck* was proceeding under a slow bell. No one hurt.

April 24.—At 8.30 a. m., while tugboat *Harsimus* was coaling at pier M, Jersey City, N. J., the engineer upon starting the engine heard a cry from the fireman. Engine was immediately stopped, and on descending to the lower engine room the fireman was found caught between the crank and bedplate. He was taken from crank pit and brought upon the deck, but was found to be dead. His name was Liborio Zerate. The engineer reported that the splashboard, which is there for protection, had been removed, for what purpose he did not know. He had noticed that it was in the proper place 1 hour and 30 minutes before the accident. Investigated, and decision May 12; case dismissed.

April 24.—About 8 a. m. ferry steamer *Tuxedo* collided off Chambers street, North River, with car float in tow of tug *Rochester*, causing damage to the ferry steamer and to car float estimated at $800. No one injured. The ferry steamer was coming out of her slip, the wind was northwest fresh, and slack tide.

April 25.—About 6.50 a. m. ferry steamer *Mineola* and tugboat *Union* came together off pier 40, South Brooklyn, causing some damage to the *Union*, but none to the ferryboat. The ferryboat was coming out of her slip at Thirty-ninth street, and the tug *Union* with other boats was pushing a steamship into her berth, and the tide and wind swung the ferryboat against the *Union*. No one injured.

April 26.—On the 3.30 a. m. trip of the ferry steamer *Hoboken*, from Hoboken, N. J., to New York, a man, who was a passenger on board, jumped overboard and was drowned. His name not known and body not found.

May 2.—About 6 p. m. towboats *Drusilla M. Cox* and *Conqueror* collided in Newtown Creek, New York, causing some damage. No one hurt.

May 3.—About 10 a. m. schooner *Marshall O. Mills*, in tow of tug *Willie*, collided in the East River, off Washington street, Brooklyn, N. Y., with schooner *Alena L. Young*, causing slight damage. No one hurt.

May 5.—About 6.15 a. m., during a thick fog, ferry steamer *Somerville* came in contact with float No. 33, off pier L, Jersey City, causing the float to sink. The float was lying across the end of pier L. Very slight damage to the ferryboat. No one hurt.

May 5.—About 6.40 a. m., during a thick fog and while the tugboat *T. J. Scully*, with barges in tow, was at anchor in Long Island Sound, west of Captains Island, the tugboat was hit by steamer *Kennebec*, causing very slight damage to both steamers. Steamers proceeded on their way. No one hurt.

May 7.—About 8.30 p. m., while ferry steamer *Queens* was on her way from New York to Staten Island, a man who was a passenger on board jumped overboard and was drowned. His name not known. A lifeboat was lowered and search made for about 20 minutes, but man could not be found.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

May 11.—At 9.30 p. m., while steamship *Vigilancia* was on her way from New York to Habana, Cuba, and about 50 miles south of Diamond Shoals light vessel, fire was discovered in the forward storeroom of the ship. Four streams of water were turned into said compartment at once, the ship stopped, and all boats swung out and kept in readiness. Fire was completely extinguished by 7.30 a. m. of May 12, and ship proceeded on her voyage to Habana. Master reported no damage to ship, only to sundry stores in the storeroom, and none of crew or passengers hurt.

May 11.—About 8.04 a. m. ferry steamer *Montauk* and tugboat *Robert Burnett* came together off Whitehall street, New York, causing slight damage. The ferryboat had just left her slip. The river was crowded at the time. No one hurt.

May 12.—At 3.30 a. m., while the tugboat *W. A. Forman* was lying at Sedgwick, street, Brooklyn, N. Y., fire broke out from some unknown cause down in the fireroom, burning the deck house and pilot house badly before being put out. No one hurt.

May 12.—While the tugboat *Blue Stone* was at Communipaw coal dock, Jersey City, she was swinging around so as to take coal on, when the quick water from the U. S. Government steamer *Scout* came over her rail and filled her deck, causing her to keel over and sink. The *Blue Stone* was raised that night and towed to dry dock. No damage to hull, and boiler found all right. No one hurt.

May 14.—About 1.30 p. m. car float in tow of tug *Transfer No. 15* collided off Sunken Meadows, East River, with steamer *Mary E. Gordon*, causing considerable damage to the pilot house of the *Mary E. Gordon*, but very slight damage to the float. Both steamers bound for New York. No one injured.

May 14.—During the night while tugboat *George S. Tice* was passing between piers 8 and 9, Elizabeth, N. J., she struck the sunken wreck of the canal boat *Judge Parker*. No damage to the *George S. Tice*. No one hurt. This matter was reported to the supervisor of the harbor, so that sunken wreck might be looked after.

May 16.—About 9.45 p. m., while tugboat *Narragansett* was off Twenty-third street, North River, coming down the river, in ebb tide and wind southwest, an unknown schooner ran into the bow of the tugboat, tearing off low fender and struck side of float in tow, causing some damage to cars on float, but none to float. No one hurt.

May 16.—About 8.15 a. m., while steamer *Apache* was on her way from Charleston, S. C., to New York, and with Absecom light-house bearing one-half north, broke tail shaft and lost propeller. Steamer anchored in 10 fathoms of water. At 6.45 p. m. she was taken in tow by steam yacht *Tuscoria* and towed to New York, arriving at 8.30 a. m., May 17, and repairs made.

May 16.—At 5.10 p. m. ferry steamer *Baltimore* and steam lighter *Greenwich* collided off Desbrosses street, North River. The *Greenwich* struck the ferryboat with her stem at a point on the *Baltimore's* port bow about 30 feet abaft of the extreme forward point. The lighter, being very low in the water, passed under the guard of the ferryboat and made a hole in the hull of the latter vessel, as a result of which the *Baltimore* subsequently sunk in her slip at Desbrosses street. All passengers and the freight safely landed from the ferryboat before she sunk. The ferryboat was on her way from Jersey City to her Desbrosses street landing. No one injured. Investigated May 22; decision June 1, reporting the pilot of the steamer *Greenwich* to the collector of customs and U. S. district attorney at New York, and exonerating the pilot of the *Baltimore*.

May 17.—At 9.55 p. m., when tugboat *John K. Gilkinson* arrived abreast of Romer Light, on her way to the dumping grounds, the scow man on *Scow No. 3*, while letting out his intermediate hawser, got his foot caught, which resulted in his foot being torn off. He was removed from scow and taken to hospital for treatment.

May 18.—While tugboat *Alice* was towing a coal barge off Twenty-seventh street, Brooklyn, N. Y., the steamship *Langfond*, that was being helped out by a tugboat, started her propeller and the suction pulled the coal barge into the wheel, tearing a hole in the bottom of the barge and causing her to sink in 10 minutes. No one hurt.

May 18.—The captain of a scow in tow of tug *Nonpareil* on her way from the dumping grounds to New York was lost. The pilot of the tugboat stated that the man gave him signal at the dumping grounds, but when he reached the Narrows he blew for the captain of the scow, but failed to get any response. He then put a deck hand on board the scow, but deck hand could find no one on board. He searched the scow but could not find the captain. The coat of the captain was found hanging up in the cabin of the scow.

May 22.—About 8.45 a. m. ferry steamer *Syracuse* and tugboat *Wilkes-Barre* had a slight collision off pier 25, North River. No one injured. The ferryboat had just gotten out of her slip, and the tugboat was bound down the river. The tugboat hit the ferryboat a glancing blow, starboard side, about 25 feet aft of amidships.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

May 28.—Ferry steamer *Flushing* and tugboat *Genesee* had a slight collision off Thirty-fourth street, East River, causing very slight damage. No one hurt.

May 29.—About 6 a. m. the ferry steamer *Montauk* and tugboat *Columbia* came together off Whitehall street, New York, causing very slight damage to the tugboat and no damage to the ferryboat. Both steamers were going in the same direction. Investigated June 11; decision June 15, suspending the license of Edward A. Snyder, pilot of the tug *Columbia*, for 20 days.

May 31.—The U. S. Government ferry steamer *Ellis Island* on her 1 o'clock trip from New York to Ellis Island, hit the pier at her landing at Ellis Island, causing some damage. No one hurt. The pilot states that when ferry steamer was about to enter the slip, steamer *William Fletcher* backed down from end of dock across the slip, and the *Ellis Island* had to shear into the pier to avoid hitting her. Investigated June 12; decision June 27; case dismissed.

June 1.—At 4.30 p. m. tugboats *John M. Worth* and *Freehold* had a collision off the end of pier 46, North River, causing very slight damage. The *Freehold* was backing out of the slip at pier 46, when the accident occurred. No one hurt.

June 2.—About 3.40 p. m. fire steamer *Abram S. Hewitt*, while going to a fire, collided with tugboat *Ella* off pier 33, East River, causing slight damage. No one injured.

June 7.—About 8.40 p. m. float in tow of tug *Hazelton* collided off Morris street, North River, with lighter in tow of tug *Thomas Walsh*, causing slight damage. No one injured.

June 7.—At 3.05 p. m. tugboat *Plymouth* and steamer *Bridgeport* had a collision in the East River, just below Brooklyn bridge. Damage to *Bridgeport* about $100. No damage to the tug, no one hurt. The *Bridgeport* had just left her slip on her way for Bridgeport, Conn.

June 11.—About 8.15 a. m. barge in tow of tug *R. S. Carter* and barge in tow of tug *Irving G. Keller* collided off pier 24, North River, causing the barge in tow of the *R. S. Carter* to fill and sink. Barge was towed later to the Jersey flats. No one injured.

June 12.—Ferry steamer *Manhattan* was reported to the collector of customs at New York for navigating on an expired certificate of inspection between May 31 and June 4, 1906.

June 12.—About 6.05 p. m. float in tow of tug *Elmira* collided off Pavonia ferry, Jersey City, with ferry steamer *Paterson*, doing no damage.

June 16.—About 1.10 p. m. ferryboat *Musconetcong* and tugboat *John V. Craven* collided in the North River, causing slight damage. The ferryboat was on her way from Hoboken to New York, and the tugboat was bound up the river. One woman on the ferryboat claimed to have been injured.

June 17.—At 4.23 p. m. the steamer *Pegasus*, while making her pier at foot of Twenty-second street, North River, and the tugboat *Archie Crossman*, coming out of slip between Twenty-first and Twenty-second street piers, collided, tug hitting the steamer on the starboard side forward of the midship gangway, doing slight damage. No one hurt.

June 17.—At 12.45 a. m. freight steamers *Express* and *Omi* had a slight collision off Newark Bay light-house, while running in a thick fog. Damage slight. No one injured.

June 23.—Towing steamer *John Duff* was reported to the collector of customs, New York, for navigating on an expired certificate of inspection, between June 20 and June 22, 1906. This matter was investigated by this board on June 30; decision rendered July 11, and case dismissed; no willful violation committed.

June 26.—About 6.45 a. m. freight steamer *Suffern* collided off Hoboken ferry slip with ferry steamer *Netherlands*, causing very slight damage. No one hurt.

July 1.—About 1.05 p. m. ferry steamer *Bergen* and excursion steamer *Perseus* collided off Twenty-first street, North River, causing very little damage. No one hurt. Investigated July 10. The board disagreed as to decision, and referred the case to the supervising inspector of the second district, and he rendered decision September 5, suspending the license of Moses Osborn, jr., the master of the *Perseus*, for 40 days, and the license of Oren D. Relyea, pilot of the ferryboat *Bergen*, for 100 days.

July 4.—About 6.20 p. m., while tugboat *Nathan Hale* was bound east with barges loaded with coal in tow, and when off Rivington street, East River, an eddy caused the barges to swing into slip at Rivington street and strike a railroad float loaded with manure cars, which was made fast alongside of wharf, causing the car float to sink. The barges were cleared of the float and towed to Bridgeport and New London. No one injured.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

July 7.—About 6.30 a. m. tugboats *Henry D. McCord* and *Florence* collided off pier 22, Brooklyn, N. Y., causing slight damage. No one injured.

July 8.—About 11.30 p. m., while steam yacht *Endion* was lying at Atlantic Yacht Club, Sea Gate, Long Island, fire broke out in the coal bunkers from some unknown cause. The fire was extinguished by the crew by means of hand pumps and buckets. Damage estimated $1,000. No one injured.

July 10.—About 5.30 p. m. ferry steamer *Colorado* had a very slight collision with a lighter in tow of the tug *Sarah E. Easton*. No one hurt.

July 10.—Decision was rendered in the investigation held in the matter of complaints made against J. Nevius Kay, master of the steamer *Lewis Luckenbach*. Case dismissed. Investigation held April 27, 28, and June 20, 1906.

July 11.—About 6 p. m. ferry steamer *Newburgh* had a slight collision off Forty-first street, North River, with the steam yacht *Kanawha*. The ferryboat had just left her slip at Forty-second street. No one injured.

July 13.—About 5.45 a. m. ferry steamers *Paterson* and *Hoboken* had a slight collision off Twenty-third street, North River, causing very slight damage. No one injured. There was a thick fog at the time, and the ferry steamers were blowing their whistles, but drifted together. No one hurt.

July 14.—About 4.10 a. m. ferry steamers *Paunpeck* and *West Point* collided off Twenty-third street, North River, causing slight damage. The *Paunpeck* had just left her slip and the *West Point* was coming up the river. No one hurt. Investigated July 30; officers of the vessels tried September 4. The board disagreed as to decision and referred the case to the supervising inspector, second district, who rendered decision September 25, suspending the license of Samuel K. Goldsmith, pilot of the *West Point*, for 60 days, and of Frank M. Garrison, pilot of the *Paunpeck*, for 60 days, both suspensions to date from August 2, 1906.

July 15.—At about 11.30 a. m. a 2-inch wash plug on the outboard end of mud drum of No. 2 boiler on the municipal ferryboat *Richmond* blew out, scalding the 4 men on duty in No. 1 fireroom, in which the boiler was situated. The men were not seriously injured. No injury to the boiler or hull. A special examination was made by this office and recommendations made to have fireroom put in a more safe condition.

July 17.—About 4 p. m. ferry steamer *Texas* and steam yacht *Inga* had a very slight collision off Twenty-third street, East River. The accident took place as the ferryboat left her slip. No one injured.

July 17.—About 2.50 p. m. canal boat *S. K. Nestor*, in tow of tugboat *Theresa Verdon*, and steamer *Sagamore* collided off Catherine street, East River, causing considerable damage to the canal boat, but very slight damage to the *Sagamore*. No one injured.

July 19.—About 7.25 p. m. excursion steamers *Thomas Patten* and *Perseus* collided off Mud Flat bell buoy, off Bay Ridge, New York Harbor. The *Thomas Patten* was on her way from the Highlands to New York, and the *Perseus* was going to Coney Island. There was a dense fog at the time, and the masters of both vessels stated that they were blowing fog signals and going at reduced speed. The bow of the *Thomas Patten* came in contact with the port side of the *Perseus*, doing considerable damage to both vessels. The steamers remained in contact until the passengers were taken off both vessels by the ferryboat *Bronx* and the steamers *Cetus* and *Commodore* and tugboat *Bush*, and all safely landed in New York. No one hurt. Investigated July 26; decision August 23; case dismissed.

July 23.—About 10.30 a. m. float in tow of tug *Transfer No. 8* collided off Whitehall street, New York, with the ferry steamer *Shinnecock*, causing damage estimated at $150. No one hurt. The pilots of both steamers state that there was a great congestion of vessels at the point, and both steamers were stopped, but the *Shinnecock* had to back out of the way of another steamer, and while doing so the float hit her.

July 23.—At 1.35 a. m., while the freight steamer *Lewis Luckenbach* was off Point Arenas, Virgus Island, Porto Rico, the deck watch reported fire in bridge deck, port side. Fire gang connected, 3 streams of water being on in about 4 minutes from time alarm was given. At 2 p. m. fire extinguished in bridge deck and water stopped. On examination it was found that the fire had originated in port coal bunker under bridge deck. Only damage was several barrels of molasses damaged and burned. No one hurt.

July 23.—About 10.30 a. m., tugboat *Catasauqua* collided off pier 3, North River, with the excursion steamer *Cetus*, causing slight damage. No one injured.

July 26.—Investigation was held in the matter of complaint that the steamer *Thomas Patten* was navigated without having a licensed mate on board as called for

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

by certificate of inspection. Decision August 3, suspending the license of James E. Hubbs, master, for 10 days.

July 26.—About 8.10 p. m., steamer *Thomas M. Mulry* and excursion steamer *Glen* collided in the East River, near Blackwells Island, causing very slight damage. No one hurt.

July 27.—About 10 a. m., ferry steamer *Farragut* and tugboat *Henry O'Brien* collided off pier 16, East River, causing slight damage. No one hurt.

July 29.—About 10.45 p. m., float in tow of tug *W. E. Cleary* and tugboat *Ithaca* collided off Stanton street, East River, causing some damage to the *Ithaca*, but none to the float. No one hurt.

July 30.—About 7 p. m., steamer *Falcon* went ashore on rocks north of Hart Island, Long Island Sound, caused, the captain stated, by the buoy that marked the rocks being out of place. The light-house inspector was notified. No one hurt.

August 1.—An investigation was held in the matter of complaint against William Still, of the motor boat *Trio*, that he had carried passengers in excess of life-preservers on board. Decision, August 24; case dismissed.

August 2.—About 8.50 a. m., ferry steamer *West Point* and steam yacht *Lavrock* had a very slight collision off pier 23, North River, causing very slight damage. No one injured.

August 4.—About 6.30 p. m., float in tow of tug *New York Dock Co.*, and steamer *John W. Garrett* collided in the East River, causing slight damage. No one hurt. The *New York Dock Co.*, was stopped to let a ferry steamer pass, and the *John W. Garrett* was astern of the ferry boat, and her engines were reversed, but she had too much headway on and hit the float.

August 5.—About 9 p. m., excursion steamer *Rosedale* and steam yacht *Norman* had a slight collision off the Battery, New York. The *Norman* was taking on passengers off the Battery landing, and the *Rosedale* had just left her dock at the Battery. The bowsprit of the yacht was carried away. Very slight damage to the *Rosedale*. No one injured.

August 6.—About 7.45 p. m., ferry steamer *Hackensack* went aground off Lawrence Point, East River. The pilot reports the accident as follows: "Cry of man overboard was raised among the passengers. I immediately sounded the usual alarm for lowering lifeboat and calling crew to quarters, and as soon as I reached a place of safety I stopped the *Hackensack* and ordered lifeboat lowered. Through the interference of some of the passengers quite some delay was caused, and not being able to work engines until boat was clear from *Hackensack* the tide got control of the *Hackensack* and grounded her." Steamer got off in 1 hour. No damage. No trace of man being overboard. No one injured.

August 7.—About 9.30 a. m., tugboats *Harlem River* and *Margaret D.* collided off One Hundred and Twenty-fifth street, Harlem River, causing the *Harlem River* to list over so that she filled with water and sunk. No one hurt. The steamer was afterwards raised.

August 9.—While the excursion barge *Andrew M. Church* was returning from Empire Grove, and when opposite Sing Sing, Hudson River, a man, who was a passenger on board, jumped overboard and was drowned.

August 9.—While the excursion steamer *William Storie* was coming out from Communipaw, N. J., 2 of the deck hands fell overboard and were drowned. The body of 1 man was recovered by the crew of the *William Storie*. No one saw them fall, but the rail forward of the paddle box on port side of saloon deck was broken, and as the men were in the habit of leaning across the top of this rail and bracing their feet against house when pulling up fenders, it is believed that when they were pulling up the fenders, when steamer left slip the rail gave way and the men fell overboard. The steamer was examined by this office on the 10th instant and rail found renewed.

August 9.—About 6 p. m., ferry steamer *Washington* and tugboat *Morristown* had a very slight collision off Cortlandt street, North River. No one hurt. The ferryboat was making for her slip and the tugboat was backing out from adjoining slip. The ferryboat backed, but the strong tide caused the ferryboat to sag against the tugboat.

August 10.—Steamship *Brooklyn* went aground at Ponte Delgarde, St. Michaels, Azores. The chief officer reports as follows: "In maneuvering for the anchorage, owing to mistakes, the ship grounded on the rocks which extend beyond the end of the breakwater. Several attempts were made to float her at first with failure," but ship floated on August 21 and was taken into harbor, where temporary repairs were made. Ship then proceeded to Lisbon under her own steam, where she was dry docked and further repairs made. Ship then went to northeast coast of England,

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

where permanent repairs were made and a Lloyds certificate obtained. The steamer returned to the port of New York later.

August 13.—About 4 a. m., while towing steamer *Eleanor Bush* was lying at foot of Forty-third street, Brooklyn, fire broke out in the coal bunkers, causing damage to woodwork of vessel estimated at $8,000. The fire was put out by the city fire department. No one hurt. The master reported that he believed the cause of the fire "was spontaneous combustion in coal bunkers."

August 15.—About 8.15 a. m., ferry steamer *Long Beach* and barge in tow of tug *Astral* had a slight collision off pier 32, East River, causing very slight damage. No one injured. Investigated September 5, decision September 15, case dismissed.

August 15.—About 3.15 p. m., ferry steamer *America* and tugboat *Neptune* had a slight collision in the East River, causing very slight damage. No one hurt.

August 16.—About 8.35 a. m., steamer *Kennebec* had a slight collision with barge in tow of tug *Evelyn* off pier 49, East River, causing very slight damage. The hawser of the barge broke and she got under the port bow of the *Kennebec*. No one hurt.

August 20.—Float in tow of tugboat *Transfer No. 16* and the U. S. gunboat *Yankee* had a very slight collision in the East River. The master of the tugboat reports that he was backing when the port float just touched the port bow of the *Yankee* and that when they were clear he took the megaphone and asked the captain of the *Yankee* if any damage, and he replied if any very slight. No one hurt.

August 25.—The excursion steamer *Little Silver* was reported to the collector of customs at New York that she was navigated on August 9, 1906, without a licensed mate as required by her certificate of inspection. The matter was investigated by this board of local inspectors, and the license of the master was suspended for 10 days.

August 26.—The boilers of the Erie railroad ferryboat *Goshen* were blown down on Saturday night, August 25, and washed out as usual on August 26; some minor repairs being under way at the time, under supervision of engineer. It appears that before the boilers were filled the relief watch came on and the work proceeded under another engineer, and by some misunderstanding the blow-off cocks were left open and both boilers were slightly injured, necessitating rolling of some of the tubes in the back ends. The fusible plugs melted out, but there was no steam in boiler.

August 27.—About 6.40 p. m., canal boat in tow of tugboat *New York Central No. 3*, and tugboat *Zouave* collided off Erie basin, Brooklyn, N. Y., causing slight damage. No one hurt.

August 29.—About 5 p. m., lighter *No. 228*, towed by the tug *Juniata*, started leaking. The lighter was loaded with scrap iron, which slid off when the boat took a list to starboard, and when she careened back to port she fouled the tugboat *America*, alongside at the time, sinking the *America*. The cause of the leak is unknown, and when it was found that the water came in faster than it could be pumped out, the *Juniata* was headed for the pier, and was almost in slip when the collision occurred. All hands were saved from the *America* by the crew of the *Juniata*.

August 29.—The license of David Marcus, master of the steamer *Tolchester*, was suspended for 20 days, for not carrying a properly licensed pilot on his steamer on August 18, 19, and 20, and the case was reported to the collector of customs at New York.

August 29.—Shortly after 1 a. m., the ferryboat *Red Bank* at the entrance of her slip at Jersey City, collided with the launch *Hudson*, sinking the launch. The lookout and quartermaster on the ferryboat reported some one in the launch, but efforts to rescue same were unsuccessful. The night was dark and hazy, and no lights were displayed on the launch. It was afterwards discovered that there were 2 men in the launch and both were drowned. Investigated September 13, decision September 20; case dismissed.

August 29.—At 10.55 a. m., the tugboats *Thomas Tracy* and *Transfer No. 19*, had a very slight collision off pier 50, East River. No one hurt.

August 31, and *September 1.*—Trial of W. W. Clarke, mate of the sail vessel *Occidental*, on charge of the master William Kessel, that he was "unfit and untrustworthy and incapable of filling the position of first mate" on such vessel. Decision September 14; case dismissed.

September 3.—The passenger steamer *Neptune* took an excursion party from Hoboken, N. J., bound for Hempstead Harbor, Long Island, and when the steamer had arrived off Glen Cove, one of the party, by the name of James Connelly, fell overboard and was drowned. The master of the steamer reported that he turned his boat around and had lifeboats manned and ready to launch overboard, but the man never came to the surface. He believed that the wheel struck him.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

September 5.—About 2.15 p. m., schooner in tow of tug *Crescent*, on hawser collided with a scow in tow of tug *A. R. Skidmore*, on hawser off Rikers Island, East River, causing scow to sink. Considerable damage to schooner. No one hurt.

September 6.—Trial was held in the matter of charges of misconduct made by Samuel Fontaine against Frank M. Gettings, master of the tug *Michael T. Barrett*, for using profane and abusive language. Decision September 12; case dismissed.

September 6.—Trial of Capt. William Kessel, master of the sailing ship *Occidental* on charge made by W. W. Clarke, mate, that the vessel did not carry side lights on her voyage between March 21 and April 24, 1906. The board disagreed, and case was referred to the supervising inspector, second district. The latter rendered decision September 26, suspending the license of Captain Kessel for 30 days.

September 7.—The auxiliary schooner yacht *Vergemere* while in tow of tugboat *Maria* went ashore on the south passage of Blackwells Island, East River. No serious damage and no one injured.

September 11.—While tugboat *Robert McAllister* was towing a canal boat bound for Gowanus, and when in Columbia Basin, the canal boat struck a submerged log. The log was projected up through the bottom of the boat, so that she filled with water and was beached near Clinton street, Brooklyn. No one hurt.

September 11.—Trial of Oren D. Relyea, pilot of the ferryboat *Netherlands*, for blowing "cross whistles" to the steamer *Perseus* on August 30, 1906. Decision September 20; case dismissed.

September 12.—The tugboat *Alfred J. Murray* was reported to the collector of customs at New York for navigating on an expired certificate of inspection. Last certificate expired on September 9, 1906, and vessel was insp cted on September 11 and had been running up to that date.

September 13.—About 1.25 p. m., while the tugboat *Gladiator* was going up the East River with car floats in tow, and when off Twenty-eighth street the steam yacht *Susquehanna* started out from her anchorage and hit a car on the float with her jib boom, breaking the side of the car about half its length and breaking the end of her jib boom. No one injured.

September 14.—About 9.30 a. m., float in tow of tug *New York Central No. 18* and steamer *Pequonnock* collided off pier 17, North River, causing the float to careen and dump her load of railroad cars and turn bottom side up. Cars all sunk. No one hurt. The tugboat was backing out from slip between piers 17 and 18, and the *Pequonnock* was preparing to go into her slip, but drifted against the starboard corner of the float about 10 feet from the inshore end.

September 14.—Man on scow in tow of tug *O. L. Halenbeck* was drowned. The master of the tug reported the accident as follows: "Left pier 28, East River, on September 14 at 7 p. m., with the scow *Pauline* loaded with cellar dirt, in tow. There was 1 man aboard the scow. When the dumping grounds were reached no man was found aboard the *Pauline*. One pocket had been dumped and a light was burning in the cabin." Investigated September 28; decision October 10; case dismissed.

September 15.—About 9.15 a. m., the tugboat *Wm. E. Chapman* and steam yacht *Charmary* had a very slight collision off pier 1, North River, causing very slight damage. No one injured.

September 18.—About 8.20 a. m., when the ferryboat *Mineola* was entering her slip at foot of Whitehall street, New York, she hit the ferry-slip bridge, going under the bridge and knocking down the rails of both quarters on the boat, and damaged the bridge somewhat. The pilot of the ferryboat reported that he went down and asked the engineer the cause of not stopping, and the engineer told him he "could not unhook her." The engineer reported that a pin fell from the hanging rod of the hooking gear and he had to pull the hook off by hand and replace the pin. No one injured.

September 19.—About 7.30 a. m., the ferry steamer *Annex 5* and tugboat *Ashbourne* had a slight collision in the East River, causing some damage to the ferry steamer, but none to the tugboat. The damage to the ferryboat was to her guard and wheel. No one hurt.

September 19.—At 6.25 p. m., while steamer *Homer Ramsdell* was on her way from New York to Newburg, the oiler of the vessel, Harry M. Smith, fell into the pit under the eccentric, and had his right leg crushed. The steamer put in at Seventieth street, North River, and the injured man was taken to the hospital, where he died the next morning. No one witnessed the accident but it is supposed Mr. Smith slipped and fell into the pit. Investigated October 5; decision, October 18; case dismissed.

September 21.—About 4.55 a. m., a barge in tow of tug *New York Central No. 8*, and barge in tow of tug *Hazelton* collided off Twenty-third street, North River, causing con-

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

siderable damage to the barge *Watertown* in tow of the tug *New York Central No. 8*, but slight damage to the other barge. No one injured.

September 21.—Scow in tow of tug *Hewitt Boice* collided off Twenty-fifth street, East River, with steam yacht *Revolution*, causing slight damage. The steam yacht was lying at anchor and it is reported that there was a strong tide running which set the tug down on the yacht and fouled her bowsprit and carried it away, and broke the billet head, and bent bow plates. No one injured.

September 25.—About 5.25 p. m., the tugboats *Ella* and *S. O. Co. No. 10*, collided in the East River, off Adams street, Brooklyn, N. Y., causing such damage to the *S. O. Co. No. 10*, that she sunk soon after the accident. The crew of the *S. O. Co. No. 10* took to the water and were hauled ashore at pier 2, Brooklyn, the crew of the *Ella* assisting, but 1 man, William Ray, a special officer on the *S. O. Co. No. 10*, died about an hour after he was taken ashore. Investigated October 8, 9, and 10th, and trial of Henry Quillan, master of the *S. O. Co. No. 10*, and of James J. Cross, master of the *Ella*, was held on November 10, and decision rendered December 3, suspending the license of both for a period of 15 days each.

September 25.—While the tugboat *Astral* was on her way from Port Arthur, Tex., for New York, with barge *S. O. Co. No. 90*, in tow, the steel hawser from the barge's towing machine parted during a hurricane when about 225 miles west northwest of Tortugas, Fla. The hawser parted after the steering gear on the tugboat became disabled and while making temporary repairs to the steering gear the barge drifted away. The tugboat then searched for the barge for 10 hours without finding her. The tug had then to go to the harbor of Pensacola for repairs. After being repaired the tug searched for barge for 12 hours but did not find her. The barge had a crew of 9 men. Further search was made for the barge by six different steamers but she was not found. Report of this accident was sent to the local inspectors at Apalachicola, Fla., and the loss of life is to be reported from that district.

September 27.—At 12 30 a. m., the steam lighter *Phenix*, while lying at pier at One Hundred and Fifty-sixth street, East River, sunk from some unknown cause. No one hurt.

October 1.—Frank W. Jones, engineer, was tried for navigating tug *Wilmington*, on September 8, 1906, with only 1 fireman, while the certificate called for 2. Decision, October 9, suspending the license of Mr. Jones for a period of 15 days from October 12.

October 2.—At 12 o'clock, noon, the tugboat *Royal* and the steam launch *Bronx* collided off Fulton market, East River, causing some damage to the *Bronx*, but no damage to the *Royal*. No one hurt. Investigated October 19; decision, October 30; case dismissed.

October 2.—About 8.45 p. m., car float in tow of tugboat *S. R. Callaway* and sidewheel steamer *W. V. Wilson* collided off Bloomfield street, North River, causing some damage to the *W. V. Wilson*, but none to the car float. No one hurt. The *W. V. Wilson* was preparing to enter her slip at Bloomfield street, and the tugboat was bound down the river.

October 3–17 and November 1.—A trial was held in the matter of charge that William J. McHale, pilot, left the pilot house of his ferry steamer and dropped the pin on the boat leaving an unlicensed man in the pilot house in charge of the steamer. Decision November 8; case dismissed.

October 3.—At 8.45 a. m., ferry steamer *Somerset* and freight steamer *Pequonnock* collided in the East River, just above the Brooklyn bridge, causing slight damage to the ferryboat, but no damage to the freight steamer. No one hurt.

October 4.—About 8.20 a. m., ferry steamer *Rockaway* and schooner *Julia A. Berkele* collided in the East River, off Long Island railroad ferry slip, Long Island City, causing slight damage. No one hurt.

October 8.—Ferry steamer *Pittsburg* left Twenty-third street, North River, for her slip at Jersey City, and when in midstream, deck hand Robert M. Vosburgh fell from the guard, main deck, and was drowned. The steamer was stopped and backed, and lifeboat on the main deck launched but he was not seen after falling. Investigated November 2; decision November 16; case dismissed.

October 12.—About 1.30 p. m., the tugboat *Eugene F. Moran* was bound from Brooklyn, N. Y., with barge *Brooklyn* on his port side, and when off the Gap of the Morris Canal, the freight steamer *Gypsum* came out from behind a Lehigh Valley railroad float just ahead. Both steamers backed full speed immediately, but the *Gypsum* struck the barge *Brooklyn* on its port corner, doing considerable damage to the *Gypsum*, but slight damage to the barge. No one injured.

October 12.—About 12.05 a. m., the steamer *S. S. Wyckoff* was heading up the North River, and when about 150 feet below the Christopher street ferry slip of the Delaware,

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

Lackawanna and Western Railroad, the ferryboat *Montclair* came out of her slip, after blowing her whistle. The *S. S. Wyckoff* stopped, but was struck on the starboard bow by the ferryboat, doing slight damage to the *S. S. Wyckoff*, but none to the ferryboat. No one injured.

October 14.—The tugboat *John F. Lewis* reached the dumping grounds at 3.20 p. m., with scow *Cleary No. 1*, in tow, and blew to the man on the scow to dump her, which he did with 3 pockets, but when the scow did not lighten up again the tug went alongside to investigate and was unable to find the man on the scow. Search was made but he was not found, evidently having fallen overboard.

October 14.—When the steam yacht *Colonia* lay at Oyster Bay, preparing to get underway, the center bottom manifold of the starboard after boiler blew out, scalding the 5 men who were in the fireroom. The 5 men subsequently died, 1 engineer, 2 firemen, 1 oiler and 1 coal passer. An extended investigation was held to determine the cause of the accident. Specimens cut from the manifold were subjected to tensile test, and an analysis of several samples is now being made.

October 15.—At 3.35 a. m., the steamship *Philadelphia* grounded near La Guaira, Venezuela. She floated in 6 minutes, and had the damage done to plate repaired temporarily at La Guaira, and then, after a detention of 48 hours, proceeded, arriving at Erie basin, Brooklyn, N. Y., on October 25, and vessel repaired there. No damage to cargo. No one hurt. The damage was some slight dents in plates on starboard side, and one crack in plate 15 inches long.

October 16.—Freight steamer *Stranger* reported to the collector of customs at New York for navigating on an expired certificate of inspection.

October 17.—About 7 p. m., steamer *R. J. Foster* was coming out from pier 5, East River, with boats *Harlem* and *G. D. Bigelow* in tow, on her port side, and was about 200 feet off the docks and going up the river, when she noticed the steamer *Globe* coming down heading across her bow, apparently to enter her slip. The starboard bow of the *Bigelow* came in contact with the starboard side of the *Globe*, doing considerable damage to the former vessel. No one hurt.

October 18.—At 3 p. m., tug *Waterfront* was bound down the North River, with 3 ash scows on a hawser, and after rounding the Battery, and when opposite the Thirty-ninth street ferry slip, she had a slight collision with the steamship *Conova*. No one hurt.

October 18.—Trial of A. E. Anderson, master of the steamer *Mary Powell*, for disregarding signals from the Revenue Cutter *Manhattan* during the motor-boat races on the Hudson River, on September 14, 1906. The board disagreed and case referred to the supervising inspector, second district, who rendered decision dismissing the case.

October 20.—About 5.10 p. m., while ferryboat *Cranford* was preparing to enter her slip at Twenty-third street, North River, New York. The ferryboat *Netherlands* came out of her slip just above; and, although the *Cranford* backed immediately on seeing the other boat, they collided; the *Netherlands* sagging broadside against the *Cranford*, the port side of both being in contact. Slight damage to both vessels. No one hurt.

October 20.—At 5 p. m., the steamship *Santurce* arrived at Erie basin, from Jacksonville, Fla., after a rough voyage. On the 21st, at 10 a. m., the engineers discovered that there was a fire in Nos. 1 and 2 holds. The fire was extinguished by the Brooklyn fire department by flooding the holds. Cause of fire unknown. No one hurt.

October 23.—During the night the captain of barge *S. O. Co. No. 94* (August Nilsson), was lost overboard when about 37 miles south of Cape Hatteras. The barge was in tow of tugboat *Captain A. F. Lucas*, bound from Texas to New York.

October 31.—At 2.15 p. m., car float in tow of tug *Transfer No. 20* and tugboat *Dictator* collided in the East River, causing slight damage. No one injured.

October 31.—About 4.15 p. m., tugboats *Aroma Mills* and *John Arbuckle* had a slight collision off the Battery, New York. No one injured.

November 1.—About 10.30 p. m., a barge in tow of tugboat *Nathan Hale*, that had parted her hawser, collided off City Island, East River, with the tugboat *P. J. T. Co. No. 7*, causing considerable damage to the barge. Very slight damage to the tug. No one injured. The tugboats were going in opposite directions.

November 3.—Trial of David Marcus, master of the steamer *Tolchester* on charge of collision with the Lawrence Point Shoal buoy No. 5, on August 10, 1906, and failing to report same. Decision November 15, suspending the license of Captain Marcus for 10 days.

November 4.—About 9.30 a. m., car float in tow of tugboat *Transfer No. 16*, collided in the East River, off Blackwells Island, with schooner *Fannie A. Fowler*, causing slight damage. No one hurt. The schooner was tacking and struck the car float.

November 7.—About 3.06 p. m., scow in tow of tugboat *Frank* and the steamship *Jamestown* collided off pier 26, North River, causing some damage to the scow. No

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

one hurt. The pilot of the *Frank* reported that the *Jamestown* went across under the stern of a small tugboat bound down the river and in turning to go down the river struck the scow which was the last boat in his tow.

November 7.—About 6.50 a. m., car float in tow of tugboat *Transfer No. 12*, and steamer *Maine* collided off Mill rock, East River, causing damage to both vessels. The *Maine* went ashore, but the master states there was no damage on that account. Steamer floated about 1.20 p. m., same date, and proceeded to her pier and unloaded, and the next day was hauled out on dry dock and had repairs made. One car on the car float was demolished. No one injured.

November 8 and 16.—Trial of Charles Seaman, master of steamer *Clifton*, for misbehavior under his license on complaint of Lieut. E. S. Van Boskerk, jr., United States Revenue Cutter Service. Decision, December 1, suspending the license of Captain Seaman for 5 days. Appeal made to supervising inspector, second district, who decided on December 10, that the board should not have suspended the license of Captain Seaman.

November 10.—Trial of Henry Quillen, master, and James J. Cross, master, for unskillfulness which resulted in collision between the tugboats *Ella* and *S. O.Co. No. 10*, on September 25, 1906. Decision December 3, suspending the license of both for a period of 15 days.

November 10.—William A. Van Buskirk was reported to the United States district attorney and collector of customs at New York, for obtaining a license as master from this board on September 5, 1906, by giving information in his application which was untrue. The license of Mr. Van Buskirk was revoked.

November 12.—About 7.45 p. m., just after the steamer *Pequot* had cleared the end of pier 20, East River, bound for New Haven, she collided with the tugboat *Arrow*, striking her nearly amidships, starboard side, causing such damage to the *Arrow* that she sunk soon afterward. No one injured.

November 12.—Trial of Charles J. Trevail, pilot of ferry steamer *Hamilton*, on charge of violation of pilot rules, for blowing 2 whistles to steamer *Ella* and directing course to starboard. Decision, December 14; case dismissed.

November 13.—About 9 a. m., ferry steamer *Columbia* and tugboat *John E. Berwind* had a very slight collision off Wall street, East River. No one injured.

November 13.—About 2.30 p. m., ferry steamer *Flushing* and car float in tow of tug *Transfer No. 1*, had a slight collision off Astoria ferry, East River. No one hurt.

November 14.—About 4.40 p. m., ferry steamer *Shinnecock* and tugboat *W. Freeland Dalzell* had a slight collision in the East River, off pier 4. No one injured.

November 14.—An investigation was held in the matter of a complaint made by Frank Martin, engineer of the steamer *Edgemont*, against John W. Bross. Desision November 16; case dismissed.

November 15.—About 5.25 a. m., ferry steamer *John Englis* and tugboat *Geneva*, with canal boat in tow, collided off Grand street East River, causing such damage to the canal boat that she sunk at the foot of Rivington street, where she was towed after the accident. No one injured.

November 16.—Trial of Charles McNeill, master of the steamer *Claremont*, for misbehavior under his license on a complaint of C. I. Day, assistant engineer, United States Revenue Cutter Service, said misbehavior occurring on September 15, 1906, during the motor boat races on the Hudson River. Decision, December 1; case dismissed.

November 17.—About 11.43 a. m., scows in tow of tugboats *Wm. H. Vanderbilt* and *Belle McWilliams* collided off Hoboken, N. J., North River, causing very slight damage. No one hurt. Investigated December 1; decision, December 10; case dismissed.

November 17.—Trial of Caleb G. Nickerson, master of the steam lighter *Aroma Mills*, for violation of article 25, pilot rules, and of John Cooley, master of the tug *John Arbuckle*, for violation of rule 3, pilot rules. The board disagreed as to decision, and the case was referred to the supervising inspector, second district. The latter rendered decision on December 13, suspending the license of John Cooley for 10 days and of Caleb G. Nickerson for 5 days.

November 18.—About 9 a. m., coal boat in tow of tug *John Garrett* and schooner *Pendleton Sisters* in tow of the tugboat *William J. Dailey* collided off One hundred and thirty-fourth street, East River, causing slight damage. The steering gear of the tugboat let go and the overhang of the schooner damaged the cabin of the boat in tow of the tug *John Garrett*. No one injured.

November 20.—About 11.50 a. m., ferry steamer *Elizabeth* and tugboat *Scotia* collided off Liberty street, North River, causing considerable damage to the *Scotia*, but slight damage to the ferryboat. No one hurt.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

November 21.—About 9.30 a. m., barge in tow of tugboat *William Schaubel, sr.*, and schooner *Governor Stockley* collided off Adams street, Brooklyn, N. Y., causing considerable damage to the barge and some damage to the schooner. No one hurt.

November 22.—About 6.28 a. m., scow in tow of tugboat *Olympia* and the passenger steamer *Priscilla* collided in the East River, off Thirtieth street, damaging the steering gear of the *Priscilla* so that she had to be towed to her berth. There was a thick fog at the time and the *Priscilla* had anchored, waiting for the fog to lift. The *Olympia* was on her way from Cow Bay, Long Island Sound, to Twenty-sixth street, East River, with 3 scows on a hawser astern of the tug, and when trying to round to, in order to clear the *Priscilla*, the stern scow struck the rudder of the *Priscilla*. No one injured.

November 23.—About 6.15 p. m., car float in tow of tugs *Buffalo* and *Shohola* collided off pier 6, Jersey City, with the tugboat *Brandon*, doing considerable damage to the starboard side of the *Brandon*, but no damage to the car float. Just before the collision occurred, the cook, William Jackson, and the fireman, William Mower, of the tugboat *Brandon*, jumped overboard from the stern of the boat. The cook was picked up by the tug *Shohola*, but the fireman, William Mower, was drowned. Investigated December 11; decision, December 31; case dismissed.

November 24.—About 6.30 a. m., while freight steamer *Rosebud* was lying at Forty-second street, Brooklyn, N. Y., at dock, the tubes in the starboard boiler blew out, scalding the chief engineer, James W. Wilson, and the fireman, Joseph Perciso. The engineer was so badly burned that he was taken to the Norwegian hospital in Brooklyn. The fireman was not much hurt. Investigated December 3; decision, December 13; case dismissed.

November 26.—About 1 p. m., tugboat *C. N. Kimpland* left Elizabethport, N. J., with 3 loaded dump scows. At 4.15 p. m., when abreast of West Bank light, and making about 5 miles an hour, the three-masted schooner *Charles K. Buckley*, of Elizabeth, N. J., outward bound and going at about 14 miles an hour, came upon the tow from behind, struck the stern scow fair in the after end, crushing in the scow's decks and 3 feet below the water line, the force of the collision forcing the stern scow into the other scows of the tow, causing serious damage to them all. No one hurt.

November 26.—About 5.55 p. m., tugboat *Henry U. Palmer* and the Norwegian steamer *Gwent* had a slight collision in the East River, near Brooklyn bridge. The tugboat had a float in tow. No one hurt.

November 26.—About 6 a. m., tugboat *Transfer No. 7* collided off Fourth street, Long Island City, East River, with the coal boat *Acme* in tow of the tugboat *Dictator*, causing such damage to the coal boat that she had to be beached; very slight damage to the *Transfer No. 7*. No one injured.

November 27.—At 11.40 a. m., ferry steamers *Hempstead* and *Southampton* collided at ferry slip at Long Island City. The *Hempstead* was getting in shape to go into her slip, but stopped to let a tugboat go by, and when she started again, owing to the tide, she would not turn. Signals were given to go full speed astern, and very soon afterwards the *Hempstead* hit the *Southampton* that was lying in No. 2 slip, causing some damage to both vessels. No one injured.

December 1.—About 11.20 a. m., ferry steamer *Brooklyn* and tugboat *C. W. Standart* collided off South ferry slip, New York, causing some damage to the tugboat, but none to the ferryboat. No one hurt.

December 1.—About 7.30 p. m., float in tow of tug *White Ash* and U. S. tugboat *Powhatan* had a very slight collision off pier 4, North River. No damage to the float and but slight damage to the port side of the *Powhatan*. No one injured.

December 4.—On the 2.45 p. m. trip of the ferryboat *Pittsburg* from Jersey City, N. J., to West Twenty-third street, New York, a woman, Ruth Miner, who was a passenger on board, jumped overboard and was drowned. When she went overboard the vessel was stopped and lay to for 10 minutes with life rings and lifeboat ready, but no trace of her was seen. The woman was accompanied by a relative.

December 5.—About 5.55 a. m., tugboats *Delaware* and *Geneva* collided off Morris Canal basin, Jersey City, causing such damage to the *Geneva* that she was beached inside the canal basin, where she sunk within 5 minutes after the collision. No damage to the *Delaware*. No one hurt.

December 6.—About 11.45 p. m., steamer *Bay State* and float in tow of the tug *Wrestler* collided off Long Island City, causing slight damage. No one hurt.

December 6.—About 2.55 p. m., ferry steamer *Long Beach* and tugboat *John Arbuckle* collided off Bridge street, Brooklyn, N. Y., causing slight damage. No one hurt.

December 6.—About 6.50 a. m., ferry steamer *Babylon* and steamer *Seaboard* collided off Long Island City, East River, causing some damage to both vessels. No one injured.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

December 7.—About 5.25 p. m., steam lighter *Rancocas* and float in tow of tugboat *W. H. Flannery* collided off pier 6, North River, staving in all of the side of the pilot house of the *Rancocas* and breaking steam pipes and doing other damage. She began to make water and was soon in a sinking condition, and the engineer abandoned his engine room and the crew, with the exception of 1 man, scrambled on board the car float. The man left on the *Rancocas* left in a lifeboat. There was sufficient steam left in the engine to keep the *Rancocas* moving after the crew had abandoned her, and she soon afterwards collided with the tug *S. O. Co. No. 14*, causing some damage. Then the *W. H. Flannery* picked her up and towed her to Bedloe Island flats, where she sunk. No one injured. Investigated December 11; decision, December 31; case dismissed.

December 10.—About 1.15 p. m., ferry steamer *Neutown* and tugboat *Castle Point* had a very slight collision off Houston street, East River. No one hurt.

December 11.—About 7.20 a. m., ferry steamer *Annex 4* and tugboat *Virginia Jackson* had a very slight collision off Jewel's wharf, Brooklyn, N. Y. Very slight damage. The ferry steamer had just left her slip. No one injured.

December 12.—About 6.15 a. m., ferry steamer *Virginia* and tugboat *Sachem* had a very slight collision off Grand street, East River. Very little damage. No one hurt.

December 13.—Ferry steamer *Mineola* left her slip at the Battery at about 7 p. m., bound to Thirty-ninth street, South Brooklyn, and when in the Buttermilk channel, there was a thick fog, and in keeping clear of the ferryboat *West Brooklyn*, she went over the black buoy at the south end of Governors Island, but doing no damage to the buoy or ferry steamer. The U. S. Light-House Department was notified of the accident.

December 14.—Tugboat *Julia C. Moran* left Jersey City at 8 p. m. with 2 loaded scows bound for the dumping grounds off Sandy Hook, and when off Hoffman Island the usual signal for paying out the scow hawser was given by the tugboat, but was not responded to and when the tug went back to the scow to see what was the matter the scowman was missing from 1 of the scows. The man on the other scow said he had called him, and it is supposed that, as he came from the cabin of the scow in answer to the call, he fell overboard.

December 15.—About 8.40 a. m., barge in tow of tugboat *F. Woodruff* collided off pier 20, North River, with float in tow of tugboat *Narragansett*, causing very slight damage. No one hurt.

December 15.—At 2.55 p. m., ferry steamers *Hamburg* and *Ridgewood* had a slight collision off Twenty-third street, North River. No one injured.

December 15.—At 4.08 a. m., just before arriving at the port of New York, the steamship *Monterey* collided with the pilot boat *Hermit No. 7*. The pilot boat sunk in a few minutes after the accident. No lives lost.

December 15.—At 5.45 p. m., wrecking steamer *North America*, with lighter *Lottie* in tow, was going in to anchor at Sandy Hook, when the *North America* ran on the point of Sandy Hook. Her way was stopped before she reached the point, but her master was afraid to back for fear of picking up the hawser from the *Lottie* in the wheel. The steamer drifted bow on to the point, but backed off at once as soon as the wheel could be used. No damage resulted.

December 16.—In the afternoon, tugboat *New York Central No. 19* collided off Weehawken, N. J., North River, with a small launch named *Magenta*, causing the launch to capsize. The accident occurred as the tugboat was rounding to so as to go into her berth. There were 2 men in the launch, both were rescued and refused to give their names to the master of the tugboat. The launch was taken in tow by the tugboat and towed to ferry dock. Two whistles were blown by the tugboat and answered by the launch and the tugboat backed. No one drowned.

December 17.—At 4.30 p. m., while oyster motor boat *W. H. Hoy* was at pier 28, North River, the deck hand, James Monahan, accidentally fell overboard from the stem of the boat and was drowned. He was shoving the boat over and lost his balance. His body was recovered.

December 24.—About 5.15 a. m., ferry steamers *Arlington* and *Ithaca* had a very slight collision off Chambers street, North River. No one hurt.

December 24.—At 5.15 p. m., ferry steamer *Atlantic* and the Arctic exploring ship *Roosevelt*, in tow of the tugboat *Guiding Star*, collided off pier 7, East River, causing very slight damage. No one hurt. The *Roosevelt* was under her own steam, bound for Forty-second street, North River, with the tugboat *Guiding Star* made fast to her on the starboard side. The *Atlantic* had slowed to let a car float and tow pass upstream, and the headway of the *Roosevelt* and *Guiding Star* was also stopped, but the flood tide sagged the *Roosevelt* against the *Atlantic*.

December 29.—At 1.25 a. m., canal boat in tow of tug *Anthracite* and tugboat *Slatington* had a very slight collision off Packer dock, Jersey City, N. J. No one hurt.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW YORK, N. Y.—Continued.

December 29.—At 2.30 p. m., while tugboat *Geo. F. Randolph* was lying at St. George, Staten Island, a plug in boiler tube blew out, and the oiler, O. E. Romberg, and fireman, D. Karlberg, were scalded. Both men were taken to the hospital. Romberg returned to the boat in a short time and Karlberg had to stay in the hospital. It is expected that he will be all right in a few days. The tube was leaking and the men were repairing it when the accident occurred.

December 29.—At 5.15 a. m., the ferry steamer *Paterson* left her slip at Jersey City, bound for Twenty-third street, North River, New York. It was flood tide, comparatively clear and hazy. When off Christopher street, she collided with the barge *Flora*, in tow of the tugboat *Joshua Lovett*, of Boston, Mass. The barge cut through the guard and into the hull of the ferry boat, and the *Paterson* sunk in less than 10 minutes after the collision. There were less than 10 passengers on the ferryboat, but several trucks. All of the passengers, drivers of the trucks, and the crew were saved, as far as known. Some of the passengers, drivers, and crew were taken on board the tugboat *John S. Smith*, and others on the *Joshua Lovett*, and safely landed at Jersey City and New York. Arrangements are now being made for an investigation of this collision.

December 31.—About 6.10 p. m., ferry steamers *Buffalo* and *Syracuse* collided in the North River, off Weehawken, N. J., breaking some of the joiner work in the women's cabin on the *Buffalo* and causing slight injuries to 2 passengers. No damage to the *Syracuse*. There was a dense fog at the time.

LOCAL DISTRICT OF BOSTON, MASS.

January 25.—Seaman Rudolph Bolin accidentally fell overboard from steamship *City of Savannah* outside of Boston light while clearing away the anchor. Ship was stopped, life buoys thrown out, and boat lowered and thorough search made, but the night being very dark, the man could not be found.

February 23.—A collision occurred between barge *Tipton* in tow of tug *Eureka* and schooner *T. Charlton Henry* in Vineyard Sound, carrying away the barge's main and mizzen masts and smashing pilot house. The schooner's stem and head gear were damaged. It seems by the report of master of the tug that they were sailing on nearly parallel courses, when schooner suddenly changed her course to cross his bow and let go his anchor. Tug had changed its course to go under schooner's stern. The schooner was communicated with and barge taken to an anchor at Vineyard Haven. No personal injury. Financial loss not stated.

March 1.—The tug *Willard*, of Portland, Me., foundered and sunk off Rockport, Mass., and 3 men out of the 5 of her crew were drowned, viz, J. E. Thompson, engineer; Godfrey Pierson, deck hand; and Geo. Gregson, cook. This case was investigated and the license of Captain E. R. Sawyer suspended for 30 days for navigating waters which his license did not cover. This case was reported by us to the United States district attorney for enforcement of penalty under section 4438, United States Revised Statutes.

March 8.—Michael Powers fell overboard from a scow in tow of tug *H. Chapel* and was drowned near Charles River bridge, Boston. Everything possible seems to have been done to save him, but he sunk before tug could reach him.

March 10.—Bernard McGovern, engineer-in-charge of ferry steamer *Gov. Russell*, of Boston, was charged with being intoxicated while on duty, by the master of said steamer. The case was investigated, charges sustained, and his license as engineer revoked.

March 26.—Tug *Joseph W. Ross* struck a snag in Boston lower harbor and was beached on Lovells Island to prevent sinking in deep water. No personal injury. Tug subsequently raised and repaired. Amount of loss not stated.

March 26.—Tug *Clara E. Uhler* sunk while lying at a wharf at East Boston. No personal injury. Steamer supposed to have caught on wharf as tide went down, as cause of sinking. Subsequently raised and repaired. Loss about $35.

April 3.—Tug *Wyalusing*, while approaching Boston Harbor, struck on Hardings ledge, was wrecked, and became a total loss. No lives lost or personal injury. The steamer had 3 barges in tow bound in, which were all saved without striking the ledge. No cause is given for the accident except the compass may have been in error, as the same course had been sailed safely by this steamer many times before. Financial loss not reported. An investigation was held as far as we could get witnesses and the master exonerated from blame.

April 19.—The steam tug *Active* took fire while lying at her wharf at East Boston. Deck house and engine room nearly destroyed. Cause of fire unknown. No personal injury. Financial loss not given.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—BOSTON, MASS.—Continued.

June 6.—A collision occurred during foggy weather between the steamers *City of Bangor* and *City of Rockland* about 25 miles SW. ¾ W. from Monhegan light. The stem of the *Bangor* was broken and bulwarks for about 10 feet stove in. Made temporary repairs and proceeded to Portland.

The *Rockland* was struck abaft paddle box on port side, damaging 4 staterooms. No personal injury resulted. Case investigated and the officers of both steamers exonerated as having both failed, in the very short time elapsing after seeing each other, to make out the course and intent of the other before it was physically impossible to prevent the accident.

June 9.—The ferry steamer *Noddle Island* collided with the slip at East Boston. There was no personal injury or very serious damage. At the request of the superintending engineer, J. R. Bartlett, a licensed officer, he having been suspended from duty because of some defect of the reversing gear, the case was investigated and Mr. Bartlett exonerated from blame.

July 4.—While steamship *North Star* was on a voyage from New York to Portland and between Cape Cod and Cape Ann seaman Geo. Wood accidentally fell overboard from her and was drowned. Master's report states ship was running about 18 knots per hour at time. Engines were put full speed astern, boat manned, and in the water in 2½ minutes and every possible effort made to rescue the man, but without success.

July 12.—An investigation was held of the licensed officers of the ferry steamer *Hugh O'Brien*, of Boston, for navigating said steamer without her current certificate of inspection posted as required by law. As the matter of posting the certificate of inspection had always been in charge of the ferry foreman, they had never felt it incumbent on them to see that it was done. The case was dismissed and the officers admonished to see to it that hereafter steamers under their charge in this respect should be navigated according to law.

July 19.—Mr. Geo. A. Brown, of Provincetown, Mass., was reported by this office to the collector of customs of that district for carrying passengers for hire on a gasoline motor vessel of less than 15 gross tons without complying with section 4426, United States Revised Statutes, as to license. A fine was imposed by the collector.

August 2.—A collision occurred in Boston harbor during a dense fog between the fishing steamer *Spray* and U. S. steamer *Executive*. The *Spray* struck the *Executive* on her port side injuring her guard. No personal injury.

August 21.—Peter Dowd, a fireman on steamer *Genl. Lincoln*, while lying at her wharf in Boston, was struck by the crank of her main shaft and killed. As the man had not been sent to the crank room the engineer can not account for his being there.

August 29—On leaving her wharf at Nantucket the steamer *Nantucket* collided with the catboat *Mildred* and sunk her. The 2 men who were in the boat were picked up by boats from the shore. The master reports that the accident was caused by the man on the *Mildred* leaving her helm which allowed the boat to suddenly stand across the steamer's bow. No loss of life or injury to steamer.

September 5.—Gasoline motor boat *Marcia*, of Marblehead, Mass., was, by this board, reported to the collector of customs at Marblehead for carrying passengers for hire at various times in July and August, 1906, without complying with section 4426, United States Revised Statutes.

November 11.—A fire was discovered at 3 o'clock a. m. between decks on steamship *Santiago*, near Pollock Rip light-vessel, bound from Boston to New York. All hands were called to quarters; it was found necessary to play water on the fire about 1 hour before it was all extinguished. No damage to vessel reported; no personal injury.

November 22.—Steamer *J. E. James* was stranded on Lovells Island, Boston Harbor, in consequence of getting her propeller fouled with the rigging of a water-logged sail boat from which they had rescued 2 men. Steamer was subsequently floated and repaired. No personal injury. Loss about $250.

December 26.—An investigation was held by the Portland board at our request relating to a collision between the steamship *Georgetown* and Pollock Rip light-vessel No. 47, which occurred on the 17th of November. From the testimony this office preferred charges against the master of the *Georgetown* for negligence and unskillfulness, and he has not yet been heard.

December 28.—J. E. Thompson, late master of steamship *St. Croix*, was before this board on charges of not keeping the steamer's equipment in proper condition while navigating said steamer. Case not yet concluded.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—Continued.

LOCAL DISTRICT OF PHILADELPHIA, PA.

January 3.—Investigation held in matter of collision between steamer *Riverside*, 72 gross tons, of Philadelphia, Pa., and steamer *Ogontz*, 113 gross tons, of Philadelphia, Pa., and decision rendered this day, suspending for a period of 1 year the second-class pilot license of Dominick McBride for a period of 3 months; the engineer license of Patrick Hanbury, both of the steamer *Riverside*; and, for a period of 6 weeks, the master and pilot license of Harry J. Collar, of the steamer *Ogontz*. Owners of steamer *Riverside* reported to the collector of customs, Philadelphia, Pa., for violation of Section 4463, Revised Statutes, in having operated said vessel without the required number of licensed officers called for by current certificate of inspection.

January 4.—It was reported to us that on December 28, 1905, at or about 8.30 a. m., ferry steamer *City of Reading*, 576 gross tons, of Camden, N. J., while proceeding slow from Kaighns point, Camden, N. J., to South street wharf, Philadelphia, during a dense fog, ebb tide, collided with British barque *Ansonia*, at anchor. When *Ansonia* was sighted ahead, engines were reversed and everything possible done to avoid collision. *City of Reading* damaged forward, guards broken, rails and stanchions carried away. No one injured. No loss of life.

January 5.—Collision having occurred December 30, 1905, between cargo steamer *Pennsylvania*, 3,343 gross tons, of New York, N. Y., and the schooner *Prescott Palmer*, 2,811 gross tons, of Boston, Mass., which collision occurred in the Delaware River, 300 feet below Buoy No. 27½ (marking the entrance to Cherry Island flats cut), at or about 6 o'clock a. m., resulting in considerable damage to schooner. Investigation was held January 4, 1906, and decision rendered January 5, 1906, exonerating the licensed officers involved from all blame, as the evidence did not show that the officers of either of the vessels were in any way responsible for the collision. Steamer *Pennsylvania*, at the time of the collision, was in charge of State pilot John F. Macintire and was in tow of the towing steamer *Sommers N. Smith*, 211 gross tons, of Philadelphia, Pa. The licensed officers of the steamer *Sommers N. Smith* also appeared before the local board, but, after a careful consideration of the testimony taken, they also were exonerated from any blame. No one injured. No loss of life. Amount of damage not stated.

January 6.—Towing steamer *Eva Belle Cain*, 20 gross tons, of Philadelphia, Pa., from Salem Cove, N. J., for Philadelphia, with barge *Uti* in tow, encountered a west-northwest gale, when off Salem flats, causing vessel to sink. Vessel raised and proceeded to railway at Camden, N. J. No one injured. No loss of life. Damage, $125.

January 9.—It was reported that on December 31, 1905, at or about 3.50 a. m., while the towing steamer *New Castle*, of Philadelphia, was lying at pier 53 south, fire was discovered in the galley by the fireman, who immediately called the engineer and also the crews of the tugs *Bryn Mawr* and *F. A. Churchman*, which were lying alongside. Fire hose was immediately coupled up, pump started and water turned on fire, which was extinguished. Galley and contents badly burned and charred and a portion of upper deck along pilot house burned. No one injured. No loss of life.

January 15.—Reported to collector of customs, Philadelphia, Pa., owners of pilot steamer *Philadelphia*, of Philadelphia, Pa., for violation of section 4463, Revised Statutes.

January 15.—Investigation held, January 3, in matter of collision between steamer *Philadelphia* and schooner *Viking*, and decision rendered January 11, suspending for a period of 6 months master and pilot license of Edwin C. Marshall, of the steamer *Philadelphia*, and censuring Henry D. Sprague, master of schooner *Viking*.

January 15.—Investigation held January 10, in matter of grounding of steamer *Shawmut*, November 23, 1905, and decision rendered January 12, exonerating John W. Mowatt, master of said steamer, from all blame, and suspending, for a period of 15 days, the mate and pilot license of Henry C. Perring, who was in charge of the movements of vessel at time of grounding.

January 15.—Reported that on January 14, at or about 5 p. m., towing steamer *Cuba*, 594 gross tons, of Fall River, Mass., when off Delaware capes, collided with sunken obstruction, breaking off 1 blade of propeller. Vessel returned to Philadelphia and was placed on dry dock. Hull uninjured. No one injured; no loss of life.

January 15.—Ferryboat *Arctic*, on trip from Philadelphia to Camden, while entering dock at Camden, pilot gave engineer bells to stop and back, but engine hung on center and refused to respond, thus causing the ferryboat to strike bridge of dock, resulting in slight injury to 2 passengers on board the ferry steamer. No loss of life.

January 17.—At or about 5.30 a. m. towing steamer *Mollie*, 36 gross tons, of Philadelphia, Pa., proceeding from Marcus Hook, Pa., to Philadelphia, with oil lighter in

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

tow, when opposite League Island and abreast buoy No. 44 engineer attempted to open surface blow. A loud report was heard, accompanied by escaping steam. Fires were hauled. Engineer John Herzog found to be missing. Lighter was immediately anchored and steamer moored alongside. Master reported case to this board. We immediately visited vessel and found Jenkins globe valve, located at port side of boiler, accessible through door to deck house, was without bonnet or disk seat. Body of valve chamber carefully examined by us and found intact as to thread and material. Showed that red lead, which we presume was put on bonnet thread, only covered 2 threads in body of valve chamber. Disk in this valve was renewed January 12, 1906, by the engineer, assisted by fireman, and same had not been used until time of accident. Accidental escape of steam and water was result of valve bonnet not having been properly screwed into valve chamber. Boiler examined January 18 and found in good condition throughout. Body of Engineer John Herzog found in river.

January 20.—Report of January 15, reporting owners of pilot steamer *Philadelphia* to collector of customs, withdrawn and steamer reported for violation of sections 4400 and 4438, Revised Statutes.

January 20.—Reported to the U. S. attorney, Philadelphia, Pa., Judson D. Bennett, of Cape May, N. J., for violation of section 4438, Revised Statutes, he having taken charge of a watch on the pilot boat *Philadelphia*, December 20, 1905, while navigating the high seas, although he was not licensed as either master or mate.

January 22.—It was reported that, on January 12, at or about 11.45 a. m., passenger steamer *Cherokee*, 2,556 gross tons, of New York, N. Y., D. E. Archibald, master, while on voyage from Grand Turks Island to New York, laden with general cargo and 10 passengers, during dense fog, grounded on the outer edge of Brigantine shoal. Fifteen minutes before grounding, soundings showed 9 fathoms. Vessel grounded in 18 feet of water. No loss of life; no one injured. February 1, *Cherokee* was hauled off shoal and towed to Philadelphia by towing steamers *North America* and *John F. Lewis*, which same vessels pulled her off shoal. Case investigated February 16, and decision rendered February 17, finding the master, D. E. Archibald, guilty of neglect to take the proper precautions in navigating vessel, and suspending, for a period of 1 year, his master and pilot license. All other licensed officers involved were exonerated from all blame.

January 24.—Reported that, on January 12, at or about noon, steamer *Winyah*, 1,682 gross tons, of New York, N. Y., while proceeding up Delaware River, during dense fog, grounded on lower end of Pea Patch shoal (bottom soft). Floated at 12 o'clock midnight, with assistance of towing steamers *New Castle* and *Delaware*, and proceeded to Philadelphia. Hull sustained no damage. No one injured; no loss of life.

January 27.—Investigation held January 26, in matter of ferry steamer *Arctic* colliding with bridge in ferry slip, and decision rendered this day, suspending, for a period of 15 days, first-class pilot license of John R. Baker, and exonerating Engineer Wm. A. Gravenstine from all blame.

February 1.—It was reported that, on January 26, at or about 5 a. m., towing steamer *Defiance*, 154 gross tons, of Baltimore, Md., towing 2 car floats from Philadelphia to Norfolk, Va., when 2 miles below Brown buoy, one of the car floats sunk suddenly, there being no apparent cause for accident. Wind at time northeast; velocity 25 miles per hour; very little sea. No one injured; no loss of life. Valuation of float not stated.

February 1.—Towing steamer *Laura*, 28 gross tons, of Philadelphia, Pa., while attempting to place a lighter alongside shore back of Burlington Island, vessel grounded, it being low tide. As tide rose, vessel listed to port and filled with water. No one injured; no loss of life; amount of damage not stated. Vessel to be pumped out.

February 1.—At or about 6 p. m. towing and wrecking steamer *North America*, 289 gross tons, of Philadelphia, Pa., while proceeding up Delaware Bay, towing steamer *Cherokee*, broke forward corner on thrust shaft. This vessel was assisting in pulling steamer *Cherokee* off Brigantine shoal on January 13, during heavy northeast gale and corresponding sea, and it is believed by the master that thrust was damaged at that time. No one injured; no loss of life; amount of damage not stated.

February 7.—It was reported that, on January 27, at or about 2.30 p. m., steamer *Mohican*, 2,255 gross tons, of New York, N. Y., on voyage from Philadelphia to Norfolk, while proceeding down Delaware Bay and opposite Dan Baker shoal gas buoy, owing to low tide, took a sheer toward a sand dredge, anchored on port side of channel, and, in trying to avoid a head-on collision with said dredge, steamer collided with and capsized a loaded sand barge. Person in charge of barge, in jumping to

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

another barge alongside, fell on deck and was slightly injured. No loss of life; amount of damage not stated.

February 21.—It was reported that, January 21, at or about 1.30 p. m., during thick fog, wind southwest, force 3 (Beaufort scale), schooner *Alice E. Clark*, 1,621 gross tons, of Portland, Me., having aboard starboard tacks, heard fog signal of a vessel, indicating same was on the port tack. Fifteen minutes later, schooner *Mary F. Barrett*, 1,833 gross tons, of Bath, Me., collided with schooner *Alice E. Clark*, striking the port side about 3 feet abaft main rigging, damaging same, carrying away mainmast, and other damage. Damage estimated at $5,000. No one injured; no loss of life. On receipt of detailed reports from masters of schooners, we found that schooner *Mary F. Barrett*, the vessel required to keep out of the way by the international rules for preventing collisions, owing to the direction of the wind did not clearly hear the fog signal of the other vessel, until such time as collision was inevitable, when every endeavor was made to avoid same. Both reports agree in stating that fog signals, lookouts, etc., were strictly complied with, as required by international rules.

February 28.—At or about 10 a. m. schooner barge *Number Eleven*, 953 gross tons, of Baltimore, Md., foundered during northwest gale and heavy sea, about 10 miles east southeast of Fenwicks Island light-vessel, barge being 1 of 3 in tow of steamer *Cumberland*, 377 gross tons, of Baltimore, Md. When barge sunk, 4 members of the crew were seen to leave her in lifeboat. Owing, however, to condition of wind and sea, crew of steamer *Cumberland* were unable to render any assistance. Steamer *Cumberland* anchored 2 remaining barges and returned to locality of foundering, cruised around in a circle of 20 miles, but was unable to find boat containing crew of barge. Fate of crew of barge unknown. Newspaper reports, March 26, show that boat was not found.

March 5.—On affidavit of Nathaniel L. Cullin, setting forth that Granville S. Jefferson had falsely sworn in regard to time of service stated in his application for license as second-class pilot, which license was granted him by this board, May 2, 1904, we have this day reported said Granville S. Jefferson to U. S. district attorney at Philadelphia for violation of section 4445, Revised Statutes.

March 7.—Reported to collector of customs at Philadelphia owners of freight steamer *Chester*, 419 gross tons, of Chester, Pa., for navigating on expired certificate of inspection. Licensed officers investigated, March 13; decision rendered same date, censuring officers for oversight, and case dismissed.

March 16.—Steamer *Anthony Groves, jr.*, 605 gross tons, of Philadelphia, Pa., bound from Baltimore, Md., to Philadelphia, while proceeding out of canal lock at Delaware City, Del., was blown by wind against wharf at entrance to canal, breaking propeller. Vessel towed to Philadelphia and put in dry dock. No one injured; no loss of life; amount of damage not stated.

March 20.—At or about 5.30 a. m. towing steamer *Amanda Powell*, 38 gross tons, of Wilmington, Del., while moored at wharf, with 2 men aboard, caught under wharf on rising tide, filled, and sunk. Vessel pumped out. No one injured; no loss of life; amount of damage not stated.

April 3.—Towing steamer *Tamaqua*, 364 gross tons, of Philadelphia, Pa., while proceeding up Delaware Bay, when just below Cross Ledge light, broke tail shaft and tube. No other damage sustained, except oil pipe on high-pressure engine. No one injured; no loss of life.

April 6.—Towing steamer *Cheltenham*, 98 gross tons, of Philadelphia, Pa., while proceeding down Delaware River and opposite Washington avenue, propeller struck submerged obstruction, breaking blades. No one injured; no loss of life; amount of damage not stated.

April 6.—Trial of Samuel Watson, engineer, on charges that he had carried excessive steam. Case dismissed.

April 9.—Passenger steamer *Anthony Groves, jr.*, 605 gross tons, of Philadelphia, Pa., collided in Delaware and Chesapeake Canal, with schooner *Carrie and Belle*, 104 gross tons, of Baltimore, Md., damaging joiner work of the *Anthony Groves, jr.*, and breaking end of jib boom off schooner. No one injured; no loss of life.

April 10.—At or about 8 p. m. freight steamer *Florence*, 181 gross tons, of Philadelphia, Pa., proceeding down Delaware River, when opposite lower end of Fort Delaware flats collided with the Norwegian steamer *Captain Bennett*, which was proceeding up the river. Stem of steamer *Florence* entirely torn out and vessel beached to prevent sinking. Steamer *Captain Bennett* damaged on port side opposite engine-room space, plates being badly bent inboard from turn of bilge to waterway, steel waist sheered off at butt, rail carried away. Amount of damage not stated. No one injured; no loss of life. Case investigated April 17, and decision rendered April

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

18, suspending for a period of 15 days master and pilot license of James Blocksom, of steamer *Florence*.

April 11.—Reported to collector of customs at Philadelphia owners of steamer *John B. Patton*, 39 gross tons, of Philadelphia, Pa., for navigating on expired certificate of inspection.

April 17.—Investigation held April 14, continued April 17, in matter of licensed officers of steamer *John B. Patton* navigating vessel on expired certificate of inspection, and decision rendered April 14, suspending second-class pilot license of Harry Tees for a period of 5 days; decision rendered April 17 warning Edward Bethel, engineer, in regard to paying more attention to dates on certificates of inspection.

April 21.—At or about 9.40 p. m. steamer *Josephine Lincoln*, 18 gross tons, of Philadelphia, Pa., while tied up for night, fire occurred in engine room, doing slight damage to engine and fire room. Cause of fire unknown; no one injured; no loss of life; amount of damage not stated.

April 25.—At or about 2 a. m., while steamer *Lansing*, 4,560 gross tons, of New York, was heaving into dock on head line, slacking away on spring, bow of ship was hove against canal boat *Mary Ann*, loaded with iron ore, causing canal boat to fill and sink. No damage sustained by steamer; no one injured; no loss of life; amount of damage not stated.

April 30.—Hearing of Engineer William Crosby on charges of neglect of duty in reference to boiler of steamer *Lorraine*, to which an accident occurred April 4, 1906, caused by the accumulation of grease in said boiler. Decision rendered May 1, suspending license of William Crosby for a period of 15 days.

May 5.—At or about 6.45 a. m. steamer *El Paso*, 3,531 gross tons, of New York, N. Y., from New Orleans, La., for New York, and steamer *Charles F. Mayer*, 1,218 gross tons, of Baltimore, Md., from Salem, Mass., to Baltimore, Md., having in tow 2 barges, when off Absecon Light, N. J., during a dense fog and proceeding at a moderate speed, were in collision. Damage to steamer *Charles F. Mayer*, stem badly twisted and 4 plates damaged. Damage to steamer *El Paso*, 2 plates dented, 1 plate cracked in 2 places, and 2 frames bent. No one injured; no loss of life; amount of damage not stated. Case investigated May 17 and concluded June 12, 1906. Decision rendered June 14, suspending, for a period of 30 days each, licenses of A. C. Patten, master of steamer *El Paso*, and A. Muchow, master of steamer *Charles F. Mayer*.

May 14.—Investigation in matter of collision between ferry steamer *Chautauqua* and British steamer *Albara*, which occurred May 12, resulting in slight damage to ferry steamer but no injury to person. Decision rendered May 14, suspending master and pilot license of Jerry Marshall, for 5 days, for failure to comply with the rules of the road in regard to whistle signals.

May 18.—At or about 6.40 a. m., George Gross, seaman on steam yacht *May*, 652 gross tons, of Philadelphia, Pa., while setting after awning, fell overboard and was drowned. Every effort made to save him without avail. Body recovered at 7 p. m. same date.

May 31.—At or about 2.40 p. m., while steamer *Shawmut*, 1,624 gross tons, of Philadelphia, Pa., was lying at pier 30 south, discharging cargo, U. G. Barnard, chief mate, was drowned while diving under ship's bottom, endeavoring to place a bolt in shell plating near keel. He was warned by master and owners of vessel not to make the attempt. Every effort made to save him, without avail. Body recovered at 5 p. m. same date.

June 7.—10.30 a. m. trip of steamer *Riverside*, 72 gross tons, of Philadelphia, Pa., when about 100 feet off Susquehanna street, Philadelphia, a male passenger, about 45 years of age, jumped overboard from top deck at stern. Every effort made to save him without avail. Body not recovered.

June 14.—At or about 4.12 p. m., when opposite mouth of Christiana River and proceeding up on Cherry Island range, towing steamer *Winfield S. Cahill*, 54 gross tons, of Philadelphia, Pa., towing barges *Rose* and *Jenny Hardy*, made German steamer *Pennoil*, 2,819 gross tons, of Hamburg, Germany, (bound down river), on port bow. Steamer *Cahill* gave 1 blast of whistle, signifying they were directing her course to starboard, which was not answered. Two minutes later, gave another one-whistle signal, which was answered by the *Pennoil* with 1 blast. 4.20 p. m. steamer *Pennoil* sheered suddenly toward the *Cahill's* port quarter; sounded 3 blasts of the whistle and notified the *Cahill* to let go barge's hawser, which was done immediately. Steamer *Pennoil* collided with stem of barge *Rose*, splitting her bow open. Barge beached to prevent sinking. No one injured; no loss of life; amount of damage not stated. Case investigated June 23, and decision rendered June 25, censuring master of *Winfield S. Cahill* and the mate of same vessel for neglect to observe proper precautions in navigating vessel at the time of collision.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

June 15.—5.40 a. m., towing steamer *International*, 400 gross tons, of Philadelphia, Pa., with 3 barges in tow, proceeding up Delaware River, when opposite Washington Park, N. J., steam steering machine broke down, causing vessel to run aground and, as barges swung head to tide, 1 barge drifted into Washington Park wharf, striking after part of steamer *Pleasant Valley*, tied up at wharf, carrying away flagpole and damaging upper deck of the *Pleasant Valley*. Steamer and barges proceeded on voyage at high water, undamaged. Amount of damage to *Pleasant Valley* not stated. No one injured; no loss of life.

June 23.—At or about 2.10 a. m., towing steamer *Gwynedd*, 115 gross tons, of Philadelphia, Pa., while proceeding down river, without tow, when abreast Kaighns Point, N. J., made an object a short distance ahead, which proved to be a small power boat, with no running lights. Every effort made to clear same, without avail; struck motor boat; 1 of the occupants, William Brown, jumped on board towing steamer; the other occupant, John MacCormic, disappeared. Motor vessel picked up and towed to Bolson street, Camden. Case investigated, June 26, and decision rendered June 28, exonerating licensed officers involved from all blame. Daily papers of June 30 stated that William Brown, when tried for stealing naphtha launch of David Rankins, stated he was the only occupant of the launch at time of collision, which shows no loss of life attending this accident.

June 30.—At or about 12.15 a. m., towing steamer *Josephine Lincoln*, while tied up for the night, sunk at her dock, from unknown cause. Vessel raised at 4 p. m., same day, hauled out on railway, and found to have sustained no damage. No one injured; no loss of life.

July 5.—At or about 3.30 a. m., freight steamer *Hugo Keller*, 129 gross tons, of Bridgeton, N. J., while moored at pier 9 S., Port Richmond, Philadelphia, sprang a leak. When discovered, water was within 4 inches of fire in boilers. Got 35 pounds of steam, when water put out fires. Vessel hauled up to dock, where she sunk. July 9, vessel raised, cargo discharged, and vessel placed on dry dock. Leak caused by vessel striking submerged obstruction in dock, as tide fell, which punctured a plank in starboard bilge. Amount of damage not stated; no one injured; no loss of life.

July 6.—At or about 3.15 a. m., wrecking steamer *Somerset*, 179 gross tons, of Fall River, Mass., while lying at her berth in the Delaware breakwater, sunk from unknown causes. No one injured. No loss of life; amount of damage not stated. Vessel raised and inspectors visited same at Lewes, Del. On account of bad condition of timbers in hull inspectors report vessel is not safe to be navigated as a steamer. This board, therefore, on August 9, revoked certificates of inspection issued vessel on May 26, 1906.

July 20.—At or about 3.45 p. m., while steamer *City of Chester*, was making her wharf at Wilmington, Del., George Stare, a passenger on board that vessel, committed suicide by jumping overboard. Lifeboat lowered away in one and a half minutes and every effort made to save him, without avail, body sinking immediately.

July 20.—It was reported that on July 18, at or about 1.15 a. m., schooner *Nathaniel T. Palmer*, 2,440 gross tons, of Portland, Me., in tow of steamer *Sommers N. Smith*, collided with schooner *James B. Drake*, 1,153 gross tons, of Bath, Me., anchored opposite Reedy Island, Delaware River. The circumstances being: steamer *Sommers N. Smith* with the *Palmer* in tow was proceeding down river slowly on ranges; when just above Reedy Island, rounded-in tow, in order to anchor same, during heavy squall and dense rain, which suddenly shut out everything from view. During this squall, the 2 schooners collided, the port quarter of the *Palmer* fouling the *James B. Drake* forward. The *Palmer* sustained damage to main rail, one spanker backstay being carried away, and some minor damage done. *James B. Drake* lost jib boom bowsprit cutwater, including all head gear, and minor damage to hull forward. Licensed officers on *Sommers N. Smith* state accident was unavoidable and caused principally by the weather conditions. No one injured, no loss of life.

July 20.—At or about 2.10 p. m., towing steamer *Frank K. Esherick*, 69 gross tons, of Philadelphia, Pa., without tow, and ferry steamer *Philadelphia*, 705 gross tons, of Camden, N. J., were proceeding down river, courses of vessels nearly parallel. When abeam of each other, steamer *Philadelphia*, directed her course to pass under stern of the *Frank K. Esherick*. Owing, however, to pilot in charge of the steamer *Esherick* stopping and reversing engine vessels came together, bow of steamer *Philadelphia* striking steamer *Frank K. Esherick* at right angles, amidships on starboard side, damaging 25 feet of rail and waist. Estimated damage $300. No one injured; no loss of life. Case investigated July 23, and decision rendered July 25, suspending, for a period of 10 days, second-class pilot license of Morton C. Walsen, of the steamer *Frank K. Esherick*, for violation of article 21, inland pilot rules.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

July 25.—At 5 p. m., towing steamer *Gard B. Reynolds*, 45 gross tons, of Philadelphia, Pa., while backing out from pier 12, Port Richmond, Philadelphia, struck submerged obstruction. Vessel immediately beached to prevent sinking. Plank in hull below water found punctured. No one injured; no loss of life; amount of damage not stated.

August 3.—While steamer *John J. Hagan*, 26 gross tons, of Philadelphia, Pa., was lying at pier 8, Port Richmond, tied up for the night, vessel sunk at her dock from unknown cause, and Archie Darroch, fireman, the only person on board, was drowned. Damage to vessel, not stated.

August 7.—Charges having been preferred against Granville S. Jefferson, to the effect that his application for license as second-class pilot, and subsequent application for master and pilot license, contained false and misleading statements as to time of service, case investigated July 13 and 20, and decision rendered August 3, sustaining the charges and revoking the master and pilot license of said Granville S. Jefferson.

August 14.—At or about 3.45 p. m., passenger steamer *Twilight*, 466 gross tons, of Philadelphia, Pa., and passenger steamer *Brandywine*, 407 gross tons, of Wilmington, Del., when approaching end of Chestnut street pier to make landing, collided, master of each vessel not fully understanding the intention of the other. Stem of steamer *Twilight* above main deck damaged to extent of $5, and steamer *Brandywine* damaged on starboard bow, 3 feet abaft stem, to the extent of $75. No one injured; no loss of life. Case investigated August 17; decision rendered August 21, exonerating master of each vessel, but cautioning each to exercise greater care in approaching this landing.

August 18.—Reported to the collector of customs at Philadelphia, Pa., (through the supervising inspector, second district), owner of automobile, license No. 10429, Penna., for having violated section 4472, Revised Statutes, in refusing to extinguish fires on automobile, while same was being transported on ferry steamer *Baltic*, August 18, between Philadelphia and Camden.

August 21.—Henry G. Miller filed charges against the motor vessel *Pyne Point*, 32 gross tons, of Camden, N. J., for carrying, on August 5, 1906, a greater number of passengers than allowed by certificate of inspection. Case investigated August 23; decision rendered August 27; charges not sustained. As the investigation, however, revealed the fact that the licensed officers on this vessel had not been carrying out their duties, this board filed charges against said officers, and after trial suspended master and pilot license of John W. Tracy for 42 days; mate's license of Henry G. Miller for 42 days, and motor engineer license of Frank J. Diebold for 6 months, for inattention to their duties as licensed officers.

August 25.—At or about 12 p. m., while steamer *Philadelphia*, 40 gross tons, of Philadelphia, Pa., was lying at pier 39 south, Delaware River, tied up for night, vessel sunk from some unknown cause. No one injured; no loss of life; amount of damage not stated. Vessel raised and hauled out on railway. Examination showed seams of vessel open, stem torn from fastenings. Cause of sinking, therefore, due to leaky condition of hull.

September 6.—At or about 6.45 a. m., passenger steamer *Ericsson*, 343 gross tons, of Baltimore, Md., while proceeding up Delaware River, in thick fog, when opposite Gloucester, N. J., heard fog bell, which the master of the steamer *Ericsson* considered clear of his course; bell later proved to be signal of towing steamer *Catawissa*, 558 gross tons, of Philadelphia, Pa., which was lying at anchor with 3 barges. Steamer *Ericsson* collided with the steamer *Catawissa*, damaging latter steamer to the extent of about $40. No damage sustained by the *Ericsson*. No one injured; no loss of life.

September 7.—At or about 8 p. m., passenger steamer *Berkshire*, 2,014 gross tons, of Baltimore, Md., while proceeding down the river, when in the vicinity of Red Bank buoy No. 44, came in collision with the U. S. dredge *Delaware* proceeding up the river, as a result of which both vessels sustained considerable damage. No one injured; no loss of life; amount of damage not stated. Case investigated September 14 and decision rendered September 19, exonerating licensed officers on steamer *Berkshire* from all blame. As a result of this collision, charges were filed by the U. S. local inspectors against Joseph A. McKee, master and pilot, acting as chief mate of the U. S. dredge *Delaware*, that he had violated the pilot rules, relative to lights displayed on dredge *Delaware*. Trial held October 25, and decision rendered October 26, finding the accused guilty of the charges preferred, but, as he was not acting under authority of his license at the time of collision, no action was taken in regard to the suspension or revocation of his license.

September 7.—At or about 3 a. m., while steamer *Sweepstakes*, 227 gross tons, of Baltimore, Md., having in tow barges *Hampshire*, 830 gross tons, *Annie M. Ash*, 1,285

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

gross tons, and *Elk Garden*, 847 gross tons, was proceeding up the river, and the steamer *Santa Maria*, 5,270 gross tons, of New York, was being towed down the river by steamers *John E. Mehrer*, 76 gross tons, of Philadelphia, Pa., steamer *Bristol*, 48 gross tons, of Philadelphia, Pa., and *Brandywine*, 57 gross tons, of Philadelphia, Pa., when opposite Grubbs Landing light, steamer *Santa Maria* and barge *Hampshire* collided, steamer striking barge about 15 feet abaft stem on port side, doing considerable damage to barge above water line. Steamer *Santa Maria* sustained no damage. No one injured; no loss of life; amount of damage not stated. Case to be investigated.

September 18.—At or about 7.20 a. m., during a dense fog, passenger steamer *City of Milford*, 264 gross tons, of Milford, Del., while proceeding down the Delaware River at reduced speed, sounding fog signals and carrying required additional lookout, when off Reed street wharf, collided with lighter *Province*, in tow of steamer *Evening Star*, 37 gross tons, while steamer *Evening Star* was placing lighter in dock and sounding fog signals as required. Damage sustained slight. No one injured; no loss of life.

September 28.—At or about 9 p. m., while steamer *John P. Wilson*, 350 gross tons, of Lebanon, Del., was proceeding up Delaware River and opposite Lincoln Park, N. J., starboard propeller struck submerged obstruction, giving machinery a heavy jar, causing same to thump and bending shaft. Vessel placed in dry dock and shaft straightened. No one injured; no loss of life.

October 5.—At or about 7.30 p. m., while steamer *John P. Wilson*, 350 gross tons, of Lebanon, Del., was about making landing at the end of Greenwich pier, collided with pier, resulting in the bending of stem, buckling 3 plates on each side. Cause: Inability of pilot to operate starboard engine; bell between pilot house and engine room carried away at the time of making landing. No one injured; no loss of life; amount of damage not stated.

October 8.—At or about 11.30 p. m., sand barge *Lotus*, in tow of steamer *Winfield S. Cahill*, 54 gross tons, of Millville, N. J., from Millville to Philadelphia, when off Egg Island flats, light wind, smooth sea, sprung a leak and sunk from unknown cause. Crew taken off by towing steamer. No one injured; no loss of life; amount of damage not stated.

October 10.—Reported to the collector of customs at Philadelphia, Pa., through supervising inspector, second district, owner of automobile license No. 8302, Philadelphia, and No. 14566, New Jersey, for having violated section 4472, Revised Statutes, in lighting and refusing to extinguish fires on automobile while same was being transported on ferry steamer *Columbia* between Philadelphia and Camden, on October 10, 1906.

October 13.—At or about 9 a. m., steamer *Cretan*, 2,350 gross tons, of Boston, Mass., while docking at pier 18 South, strong flood tide, fresh northeast wind, bow blew off toward pier 17. In order to avoid collision with vessel lying at end of said pier, engines were reversed full speed. Engines then stopped and signal given to go ahead slow, then full speed. Owing to bell wires from stern of vessel to engine room becoming fouled, word had to be sent to engine room, and in the meantime vessel collided with lower end of pier, stern on, damaging dock shed near cap log, etc. Ship sustained damage above upper deck, carrying away deck rail, stanchions, nettings, flagstaff, and parting rudder quadrant chain. Amount of damage not stated; no one injured; no loss of life.

October 19.—At or about 6.50 p. m., ferry steamer *Atlantic City*, 422 gross tons, of Camden, N. J., collided with car float alongside of towing steamer *Penllyn*, 137 gross tons, of Philadelphia, both vessels having just left their respective piers. One wheel of the *Atlantic City* was disabled, and she was towed to dock by steamer *Penllyn*. No damage sustained by car float; no one injured; no loss of life; amount of damage not stated. Case investigated October 26, and decision rendered October 30, exonerating licensed officers involved from any blame.

November 1.—Charges having been preferred against James W. Clark, licensed master and pilot, by the local inspectors at Philadelphia, that his ignorance of Rule II of the inland pilot rules was such as to make him a dangerous person to be entrusted with the license he now holds. Trial was held November 1 and decision rendered November 2, finding the accused not guilty of the charges, and case dismissed.

November 5.—At or about 5.15 a. m., the U. S. steam dredge *Delaware*, while working from pier 44 South, collided with the steam yacht *May*, 652 gross tons, of Philadelphia, Pa., lying moored at her berth, pier 43 South. The steam yacht *May* sustained considerable damage to her main rail, sheer strake, frames, joiner work, etc., around top side. No one injured; no loss of life; amount of damage not stated.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

November 12.—Passenger steamer *City of Chester*, while on its 4.15 p. m. trip from Arch street, Philadelphia, bound for Wilmington, Del., broke crank pin. Vessel made wharf at Chester, Pa., without assistance. Passengers landed at Chester and transferred to destination by rail. Steamer towed to home port by steamer *Brandywine*, of same line. No one injured; no loss of life.

November 18.—Ferry steamer *Arctic*, 394 gross tons, of Camden, N. J., on her 9 p. m. trip from Camden to Philadelphia, when about 300 yards from Camden dock, shaft broke from some cause unknown. Signaled ferry steamer *Wenonah*, of same line, which latter vessel towed the *Arctic* to Philadelphia and landed passengers. No one injured; no loss of life; amount of damage estimated at $1,500.

December 6.—While towing steamer *Clarksville*, of Philadelphia, Pa., was lying at Swedesboro, N. J., deck hand Frank McHale had his leg caught between hawser and wharf, resulting in breaking of leg.

December 10.—Trial held in matter of charges filed against Ernest O. Patterson, master and pilot, for violation of inland rules relative to lights carried on U. S. steam dredge *Delaware*. Decision rendered finding Captain Patterson guilty of charges preferred; but, owing to his not acting under his license, as licensed officers were not required on this dredge, also as Captain Patterson had no control over lights carried on dredge, his orders coming from the U. S. Engineers' office, Philadelphia, case was dismissed.

December 11.—Investigation held in matter of collision between steamer *Santa Maria*, in tow of tugs *Bristol*, *Brandywine*, and *John E. Mehrer*, and barge *Hampshire*, in tow of tug *Sweepstakes*, which occurred September 7, 1906. Decision rendered December 13, exonerating all licensed officers involved, from blame as to unskillfulness, negligence, or inattention to duty, and case dismissed.

December 15.—At or about 4.15 p. m., towing steamer *Newark*, 59 gross tons. of Camden, N. J., arrived at League Island, Pa., with coal scow in tow, when fire was discovered in port bunker. Fire pump started and fire extinguished. Proceeded to Mills shipyard, Camden, arriving there 5.40 p. m.; tied up for night. Examination made and everything apparently in good condition. Watchman left on board discovered fire in starboard forward bunker about 8 p. m., and immediately summoned assistance, but fire got beyond control. Vessel sunk. After house and decks were burned off. No one injured; no loss of life; amount of damage not stated.

December 22.—It was reported that on December 8, at or about 11.45 a. m., bark *Fort George*, 1,769 gross tons, of San Francisco, Cal., in tow of steamer *Sommers N. Smith*, 211 gross tons, of Philadelphia, Pa., W. J. Minford, master, proceeding down Delaware River, when 1,000 or 1,500 feet above dredge *Vim*, lying at anchor, bark *Fort George* took a sheer which towboat was unable to break, and collided with dredge, damaging same and slightly damaging bark. No one injured; no loss of life; amount of damage not stated.

December 29.—It was reported that on December 5, at or about 9.20 p. m., passenger steamer *Cretan*, 2,350 gross tons, of Boston, Mass., while on voyage from Boston, having left that port at 4.30 p. m., December 4, when off Absecon light, New Jersey, smoke was discovered coming from the ship's forward hold through forecastle. All hands called to quarters. Live steam turned into cargo space. All fire hose led forward and water turned into cargo space. Fire appeared to be between No. 1 and No. 2 hatches below main deck. Fire was kept under perfect control and vessel arrived safely at Philadelphia, December 6, at 9 a. m. Cargo discharged from shelter and upper decks. City fire boats were alongside to render assistance if necessary. They commenced pumping water into ship about 10 a. m., continuing until 2 p. m., when fire appeared to gain. Vessel taken across river and grounded on Pettys Island flats. Three city fire boats pumped water into ship until they had flooded forward holds to main deck and entirely extinguished fire. December 7 water pumped out of ship and cargo discharged. December 14 vessel examined by assistant inspector from this office. Origin of fire unknown. No one injured; no loss of life; amount of damage unknown.

December 29.—It was reported that on December 20, at or about 2 p. m., schooner *Dorothy B. Barrett*, 2,088 gross tons, of Bath, Me., proceeding up the river in tow of steamer *Jas. McCaulley*, 92 gross tons, of Philadelphia, Pa., and Danish steamer *Texas*, 4,440 gross tons, of Copenhagen, heading directly across the river, came in collision, the steamer *Texas* striking the schooner on starboard side between the main and mizzen rigging, doing considerable damage. Weather thick. Steamer *Jas. McCaulley* and schooner *Barrett* proceeding slow and blowing usual fog signals, which were promptly answered by the other vessel. Light easterly wind; flood tide. No one injured; no loss of life; amount of damage not stated. Case to be investigated.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PHILADELPHIA, PA.—Continued.

December 31.—Trial of John F. Collins, chief engineer (200 tons), on charges preferred against him by Robert Ford, signed by Samuel C. Price, as witness, that while on duty November 28, as engineer of police and fire boat *Samuel G. King*, he had left boiler in said boat without a licensed engineer in charge, held December 27, and decision rendered finding the accused not guilty, and case dismissed.

LOCAL DISTRICT OF NEW LONDON, CONN.

April 14.—Barge *Bouquet*, one of 5 barges in tow of tug *Hokendauqua*, parted from the tow in Block Island Sound, 5 miles east of Watch Hill, R. I., and 3 miles off shore, and sunk. No lives lost or persons injured. Case investigated, and decision rendered May 25, exonerating master of tug from responsibility.

May 19.—Steamers *Quickstep* and *Falcon*, while making a landing at Fish Works wharf, Promised Land, N. Y., collided on p. m. of May 19. No lives lost or persons injured. *Quickstep* proceeded to Greenport, N. Y., for repairs. Case investigated, and decision rendered December 18, suspending for 10 days the licenses of Gabriel B. Edwards, master and pilot, and Herbert N. Edwards, first-class pilot, masters of said steamers, for violation of Rule II, pilot rules for the inland waters of the Atlantic and Pacific coasts.

June 11.—Ferry steamer *Menantic* reported carrying passengers between Greenport and Shelter Island, N. Y., on a trip designated by indorsement on certificate of inspection for the carrying of freight only. Case reported to collector of customs at Sag Harbor, N. Y., and U. S. district attorney at Hartford, Conn. Charges preferred against Willard F. Griffing, master of *Menantic*, and decision rendered July 5, suspending his master and pilot license for 10 days for violation of section 4472, U. S. Revised Statutes.

June 16.—Steamship *Horatio Hall*, en route from New York, N. Y., to Portland, Me., grounded during dense fog, p. m. of June 10, on west end of Great Gull Island, N. Y. Ship floated apparently uninjured; made no water. Arrived at Portland all right. Damage, 1 blade of propeller missing. Case investigated, and decision rendered July 25, exonerating master of steamship from responsibility.

July 10.—Joseph Sica, in attempting to board steamer *Restless* as she was leaving her pier at New London, Conn., was caught between steamer's rail and a fender pile and sustained serious injuries, from which he died 2 days later. Case investigated and decision rendered August 10, exonerating master of *Restless* from all responsibility.

July 22.—Fred Wilcox, of Glastonbury, Conn., a passenger on excursion steamer *Madeleine*, jumped or fell from said steamer en route from Saybrook to Hartford, Conn., at a point in Connecticut River between Rocky Hill and Gildersleeves, and was drowned. Case investigated, and decision rendered August 6, exonerating master of *Madeleine* from responsibility.

August 4.—Tug *T. A. Scott, jr.*, while entering New London harbor on p. m. of August 4, collided with and sunk a steam launch belonging to U. S. cruiser *Newark*. No lives lost or persons injured. Case investigated, and decision rendered August 22, exonerating master of tug from responsibility. Collision attributable to violation, on part of the steam launch, of Rule II, pilot rules for the inland waters of the Atlantic and Pacific coasts.

August 5.—Steamer *Puritan*, en route from New York, N. Y., to Fall River, Mass., when 2 miles east of Little Gull Island light, broke starboard shaft and was towed to New London, Conn., by steamer *Providence*. No lives lost or persons injured. Estimated amount of damage, $20,000.

August 8.—Steamer *City of Taunton*, en route from New York, N. Y., to Fall River, Mass., collided in thick fog with schooner *Rebecca W. Huddell* when 2½ miles west of Cornfield Shoal light vessel. With head gear carried away, schooner was towed to New London, Conn., by *City of Taunton*. Estimated amount of damage to steamer, $150; damage to schooner not given. No lives lost or persons injured. Case investigated; decision rendered September 12, exonerating officers of *City of Taunton*.

August 18.—I. Harris, a passenger on steamer *Middletown* from New York, N. Y., for East Haddam, Conn., disappeared on a. m. of August 18. In letter found among his effects, addressed to his wife, said Harris declared his intention to drown himself that night. No one saw him leave the steamer.

August 19.—John Conners, of New Haven, Conn., a passenger on excursion steamer *Madeleine*, jumped or fell overboard from said steamer at a point in Connecticut River off Hard Bargain Fish Place, and was drowned. Case investigated; decision rendered August 29, exonerating master of *Madeleine* from responsibility.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW LONDON, CONN.—Continued.

August 25.—Milosav Pejovic, a fireman, either jumped or fell from tug *Patience*, about 2 p. m., in Block Island Sound, 10 miles west of Point Judith, R. I. Body not recovered.

November 20.—Steam canal boat *Francis B. Thurber* with 2 consorts in tow, on passage down Long Island Sound, bound for Saybrook, Conn., when about ½ mile WNW. of Cornfield Point light-vessel, struck some floating object and sprang a leak. The tow was anchored. Steamer, found leaking badly, was beached on Long Sand Shoal, and afterwards abandoned as a total loss. No lives lost or persons injured. Case in course of investigation.

December 7.—Barge *Buena Ventura*, 1 of 3 barges in tow of tug *W. A. Luckenbach* foundered during a northeast gale, about 1½ miles ESE. from Montauk Point, Long Island. Three members of crew of *Buena Ventura* lost. Case in course of investigation.

December 11.—Barge *J. A. Hyland*, the last of 6 light barges in tow of tug *T. J. Scully*, bound from Newport, R. I., to New York, N. Y., was struck and damaged above waterline by U. S. revenue cutter *Dexter*, off Point Judith, R. I. No lives lost or persons injured. Case investigated; decision rendered December 20, exonerating master of tug from responsibility. *Dexter* was unable to avoid collision, owing to disabled engines.

LOCAL DISTRICT OF ALBANY, N. Y.

February 23.—Steamer *Homer Ramsdell*, while lying at the dock at Newburg, N. Y., out of commission, caught fire from some unknown cause and was damaged to the amount of $5,000.

March 18.—Tug *Thomas Dickson*, lying at Rondout, N. Y., alongside of steamer *Norwich*, caught fire from some unknown cause and was damaged to the amount of $500.

May 4.—James J. Pough, second engineer of tug *Osceola*, fell overboard and was drowned.

May 17.—Ferry steamer *G. V. S. Quackenbush* was damaged by coming in collision with the draw of the railroad bridge at Albany, N. Y., caused by loss of power of bridge when almost open. Amount of damage, $350.

May 20.—Steamer *Kaaterskill*, bound from New York, N. Y., to Coxsackie, N. Y., when near Barrytown, N. Y., was discovered on fire in the steam chimney inclosure. The fire apparatus was immediately got to work and the fire extinguished in a few minutes. Damage, trifling.

July 2.—A boy reported to some of the crew on steamer *C. W. Morse* that his brother, whose name was Paul R. Willard, had fallen overboard. The boy's body was found in the river at Catskill, N. Y., on July 5.

July 29.—Steamer *Onteora* was caught in a heavy rain squall about 11 o'clock in the night and ran ashore at Roseton, N. Y. There was no damage done to the vessel.

September 17.—Passenger steamer *Poughkeepsie* had a slight collision with an unknown naphtha launch at Newburg, N. Y. No damage to property and no one injured.

September 21.—Robert McCullough, a passenger on the steamer *Edwin B. Gardener*, was sitting on the rail, and, being intoxicated, lost his balance, fell overboard, and was drowned.

October 13.—A collision occurred between the passenger steamers *Saratoga* and *Adirondack*, near Crugers Island, N. Y., caused by running into a bank of fog. The case has been examined into and report of the result made to the supervising inspector of this district. The freight clerk on steamer *Adirondack* was drowned and an oiler on steamer *Saratoga* was killed. The steamer *Adirondack* was damaged to the amount of $20,000. The damage to steamer *Saratoga* was reported on vessel $120,000, and on cargo $40,000.

December 16.—About 2.30 a. m. fire was discovered on the steamer *Norwich*, lying at the dock at Rondout, N. Y., and alarm was sounded and the fire department responded and was in service until about 5.40 a. m., when the vessel sunk. The wrecking of steamer has been abandoned till spring, therefore we are unable to state the amount of damage.

LOCAL DISTRICT OF PORTLAND, ME.

January 26.—Small pleasure yacht *Lillian* left at mooring at South Portland, Me., discovered on fire at about 1 a. m., burned to water line and sunk. Reported total loss. Value estimated at $1,400.

January 29.—Steamer *James T. Furber*, at dock for the night, under banked fires no one on board, found on fire by police at about 1 a. m. Damage to steamer estimated at $500. Cause of fire not known.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PORTLAND, ME.—Continued.

June 16.—Steamer *Alice Howard*, at dock for the night, at Portsmouth, N. H., found on fire by night watchman. Slight damage to keelsons under boiler. Boiler ordered out and repairs made.

June 17.—Towing steamer *Seguin*, while proceeding down Kennebec River, broke crank pin, cylinder head, and sprung connecting rod. Damage estimated at $1,000. No one injured.

June 18.—While steamer *City of Augusta* was at her dock at Bath, Me., David A. Sawyer, a deck hand, at work outside, cleaning paint, fell from the guard and was drowned. No one saw him fall and cause not known.

July 16.—While steamer *Wiwurna* was on passage from Bath to Boothbay, Me., William Preston, of Bath, Me., a deck hand, went outside rail, on narrow guard, fell overboard and was drowned. No work or duty called him there. Steamer was stopped and boat quickly lowered, but the man, having on heavy rubber boots, sunk before help reached him.

September 22.—Steamer *Bay State*, while leaving Portland Harbor, at night, dark and rainy, collided with schooner *Mildred May*, carrying away her bowsprit and head gear. Steamer had only slight damage to bulwarks. Vessel's lights not seen by watch on steamer until close aboard and too late to clear her. No one lost or injured.

October 11.—Towing steamer *Joseph Baker*, with schooner *William Booth* alongside, when entering the narrows, Saco River, owing to strong current and shoal water, took rank sheer, and steamer was crowded on shore, striking bilge, and starting plank between frames. Steamer beached and partly filled. Damage to hull, $10. No one injured.

December 10.—Steamers *Forest Queen* and U. S. Government tug *Weitzel* were in collision in Portland Harbor, Me. Fresh breeze and thick snow at the time made it difficult to judge position and distance. *Weitzel* struck *Queen* on starboard bow, doing slight damage to *Queen's* guard. No other damage. No one lost or injured.

December 29.—Ferry steamer *Elizabeth City*, while crossing Portland Harbor in dense vapor, was driven from course by vessels at anchor, missed her slip, and while moving very slowly fouled coal barge at dock, doing slight damage to steamer's rail and stanchions. No damage to barge. No one injured.

LOCAL DISTRICT OF PROVIDENCE, R. I.

January 21.—About 11 a.m., during a thick fog, a collision occurred between steamships *Trojan* and *Nacoochee*, near Vineyard Sound light-ship, sinking the *Trojan* and doing slight damage to the *Nacoochee*. Crew of the *Trojan* were rescued by lines thrown from *Nacoochee*. No lives lost. Loss of *Trojan* and cargo estimated at $250,000. Investigation, February 19 and 23. Decision, April 10, suspending license of Capt. J. H. Diehl, of the *Nacoochee*, for 30 days for violation of Rule IX and for not displaying good seamanship. Captain Thacher, of the *Trojan*, was exonerated from blame in the matter.

February 16 and 17.—Investigated complaints made by A. F. Zoller against Archer C. Bradley, master of oyster steamer *James Morgan*, for alleged misconduct with reference to property of the American Oyster Company and for drunkenness. Decision, March 8, suspending license of Captain Bradley for 15 days for removing log book and book of ranges from steamer *James Morgan*. Other specifications not sustained.

March 7.—Investigated collision that occurred August 14, 1905, between schooner yacht *Onward* and steam yacht *Seminole* in Newport Harbor. Licensed officers exonerated from blame in the matter.

March 14.—About 6.35 p. m., passenger steamer *Warren* lost her rudder, when about 1,000 feet from her dock at Fall River, Mass. No one injured. Vessel towed to Providence and placed on dry dock. Loss, about $1,000.

March 27.—Passenger steamer *Plymouth*, while lying at repair shop wharf, Newport, not in commission, was burned down to her steel hull. Fire began about 1.20 a. m. Origin of fire not known. One member of the crew, Lucine Lamothe, a fireman, perished. Loss, about $1,250,000.

March 30.—About 9 p. m., a collision occurred between training station launch *Resolute* and tow of tug *Roger Williams* in Newport inner harbor, breaking 3 planks of barge *Hatteras*. Accident occurred through attempt of launch to cross hawser between tug and barge. Damage to barge, about $50.

April 16.—Tug *Caroline*, in coming out of her dock at Newport, backed into tug *Solicitor*, which was lying at her dock, and broke waist board of *Solicitor*. Damage estimated at $15. Accident was due to a mistake in bells on *Caroline*.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—PROVIDENCE, R. I.—Continued.

April 21.—Caesar Roels, a native of Belgium, aged 26 years, fireman on tug *Coastwise*, was taken sick with cramps from excessive use of icewater and died on board ship while vessel was off Five-Fathom Bank light-ship. Body was taken ashore at Lewes, Del., where a coroner's jury pronounced death due to natural causes.

May 5.—About 8 p. m., passenger steamer *Priscilla*, of the Fall River Line, while near Bristol Ferry, R. I., broke jennynettle pin in port wheel. Steamer anchored at 8.12 p. m. near Bristol ferry. About 4.45 a. m., May 6, passengers were transferred to steamer *Puritan* and taken back to Fall River. At a later hour the disabled steamer was towed to Fall River. Damage, about $4,000.

June 1.—About 7.15 p. m., a collision occurred between passenger steamer *City of Newport* and fishing steamer *George F. Morse* near Newport, R. I. The stem of the latter vessel was quite badly damaged. No damage to the *City of Newport*. No one injured. Accident was due to fog.

June 2.—About 3.15 p. m., while steamer *New Hampshire* was lying at repair shop dock, Newport, R. I., a gasket blew out of the lower manhole plate of the aft port boiler, and 2 boilermakers, Timothy Noonan and William Shaffell, who were working at the back end of the forward port boiler, lost their lives, having been overcome by steam. June 1 this board visited steamer *New Hampshire* at Newport, examined gasket, manhole plate and ring, and other parts, and reported that accident could not have been foreseen, and exonerated engineers in charge from blame.

June 15.—At 6.18 p. m., ferry steamer *General*, while on her route between Wickford and Newport, R. I., broke the propeller tail shaft in the sleeve, causing a slight leak. No one injured. Damage, about $500.

July 3.—About 6.45 a. m., a collision occurred in Newport Harbor between ferry steamer *Conanicut* and ferry launch *Wave*, of the torpedo station. Accident due to fog. *Wave* proceeded on her trip without waiting for assistance. Damage to *Conanicut*, a bent tiller. Loss, about $50.

September 4.—About 6.45 p. m., while near Point Judith, R. I., a section of the watertube boiler in steam yacht *Crescent* let go under a pressure of 220 pounds, scalding fireman Charles Olsen, who was taken ashore in a launch and died September 7 in Newport hospital from injuries so received. Repairs to boiler were completed by 10.50 p. m. on date of accident, and yacht proceeded on her way. Investigation commenced. Damage to boiler, about $10.

October 5.—About 5.50 p. m., in New Bedford Harbor, a collision occurred between ferry steamer *Fairhaven* and a 15-foot motor boat, not named. No damage to the ferryboat. Bow of motor boat was ripped so that she filled with water. She was towed in by her own boat. Accident appears to have been due to the unskillful handling of the motor boat, which was in charge of a 15-year-old girl. Loss, about $25.

October 13 and 15.—Upon request of Light-House Board, investigated charges preferred against Herbert C. Calhoun, master of tug *Patience*, for alleged negligence and violation of law in connection with the knocking down of Rose Island South Point spindle, which occurred on August 6, 1906, and for failing to make report of same. Testimony disclosed that spindle was knocked down in a thick fog by a scow in tow of *Patience*, and that the captain of the barge failed to report the matter to the captain of the steamer. Charges not sustained. Loss of spindle, about $600.

October 26.—About 11.45 a. m. Lemuel A. Dodge, while a passenger on steamer *New Shoreham*, of which he was formerly master, committed suicide by jumping overboard while steamer was near Gaspee Point, Providence River. A lifeboat was immediately lowered and the body recovered.

November 12.—By direction of the Supervising Inspector-General, took testimony at Fall River, Mass., on board steamer *Tennessee*, regarding a collision which occurred between that steamer and an unknown schooner on October 20, 1906, off Cockenoe Island, Long Island Sound. Case determined by the New Haven board.

December 7.—By direction of the supervising inspector of the second district, took testimony in regard to condition of equipment of passenger steamer *St. Croix* prior to her inspection on November 9, 1906. Case not determined by this board.

LOCAL DISTRICT OF BANGOR, ME.

January 22.—During thick fog at 4 a. m., towing steamer *Gypsum King*, W. H. Blizzard, master, stranded on Muir ledges near Grand Manan, New Brunswick, and became total loss. No lives lost, and no one injured. Loss estimated, $60,000.

July 11.—Steamer *Rockland* broke tail shaft while on passage from Belfast to Bucksport, Me. No one injured, and no other damage. Passengers taken to Bucksport by steamer *Bristol*, and *Rockland* towed to Bangor for new shaft. Damage estimated, $150.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—BANGOR, ME.—Continued.

July 19.—Steamer *Bristol* in charge of Alfred E. Smith, licensed second-class pilot, while proceeding up Penobscot River at 9.30 p. m. was in collision with small row boat containing 2 persons, both of whom were drowned. The night was very dark, and the boat showing no lights was not seen until close under bow of steamer. Every effort was made by the steamer to avoid the collision, wheel being put hard to port, and engine to full speed astern, and every effort made to save the lives of the persons in the boat. The steamer is small, and was immediately backed to the scene of the accident. Life-preservers were thrown overboard and search made, but no signs of the persons found and no outcry heard. The small boat was picked up intact with no water in her. It is thought the 2 young people were knocked overboard by the contact, or else were frightened and jumped overboard. The steamer's lights were burning brightly at the time and careful lookout kept, and no blame can be attached to the steamer.

July 28.—Steamer *Sappho* in charge of Joseph L. Norton, licensed master and pilot, while on passage from Seal Harbor to Bar Harbor, on regular trip, at 9 a. m., was in collision with small boat under oars and sail, containing 3 persons off Mount Desert. The weather was misty at the time, but as soon as the boat was seen proceeding across the bow of the steamer the wheel was put immediately to port to cross stern of boat. When boat was nearly under bow of steamer, the occupants turned boat around under bow of steamer and was struck on starboard side, a glancing blow, splitting boat from end to end. Occupants were thrown in the water, and 1 boy named Liscomb, was drowned. Other 2 occupants rescued by steamer's boat. Hearing in this case was held on October 24, and Captain Norton was exonerated from all blame.

August 8.—Steamer *Henry F. Eaton*, Capt. George E. Waite, licensed master and pilot in charge, while on excursion in Canadian waters with local pilot on board grounded on ebb tide after landing excursion. Floated next tide without damage.

August 22.—Steamer *Bristol*, while attempting to enter harbor of Stockton, Me., at 11.45 a. m., during very thick fog, grounded on smooth ledge at entrance to harbor, steamer going very slow at the time. Was floated with assistance of steamer *Reliance* and proceeded on regular trips and business. No loss of life or injury to person and no damage to steamer.

September 22.—Freight steamer *Mohawk*, in charge of Thomas E. Norton, licensed master and pilot, while attempting to enter Stockton Harbor at 2.35 a. m., and it being very dark at the time, went aground on ledge off Squaw Point. Accident occurred through mistaking new buoy off Squaw Point (uncharted and of which the master and pilot had no knowledge) for the buoy off Sears Island. Was floated September 25 by assistance of steamer *Bismarck* and taken to Rockland for repairs. Damage estimated, $400.

October 13.—Samuel L. Bulson, second-class pilot, found navigating towing steamer *Samuel B. Jones* on waters of Machias River and Bay on expired license. Case reported to the collector of customs at Machias, Me.

LOCAL DISTRICT OF NEW HAVEN, CONN.

January 23.—Oyster steamer *Amanda*, while lying at dock at Fair Haven, Conn., at about 8 p. m., was found to be on fire. The local fire department was summoned and the fire extinguished. Cause of fire unknown. No lives lost and no person injured. Estimated damage, $800.

February 7.—Oyster steamer *Mary S. Lewis*, when off Stratford Point, Conn., broke the low-pressure crank pin of engine, the resultant jar causing the fracture of a small steam pipe. No lives lost and no personal injury. Estimated damage, $450.

February 24.—Steamer *R. W. Burke*, while lying at dock at Port Jefferson, N. Y., caught fire, burning off the joiner work and damaging hull. The local fire department, with assistance of the crew, extinguished the fire. No lives lost and no personal injury. Estimated damage, $1,500.

March 19.—Oyster steamer *Gordon Rowe* was tied up at dock at New Haven, Conn., on night of March 19, 1906, and was found lying submerged on the morning of the 20th by the watchman on the dock. As near as can be determined the cause was failure on part of watchman to shut off water when tank was filled. One of the deck hands, who was asleep on board the steamer, was drowned. Estimated damage, $500.

March 28.—Steamer *Richard Peck*, bound from New Haven to New York, was found to be on fire at about 2.10 a. m., when about 14 miles west of Falkner Island. Fire was discovered by a watchman; crew was called to quarters and the fire was extinguished in less than 5 minutes. No lives lost and no personal injury. Estimated damage, $150.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SECOND SUPERVISING DISTRICT—NEW HAVEN, CONN.—Continued.

July 9.—Ferry steamer *Cyntha* broke bolt in crank pin brass, which caused the piston and cylinder head to break. No lives lost and no personal injury. Estimated damage, $200.

August 10.—Reported the freight steamer *Bradford* to the collector of customs, New Haven, Conn., for navigating on an expired certificate of inspection between August 4 and 9, 1906. Case investigated September 12, 1906, and the licenses of Nathan A. Hull, master and pilot, and Burtis N. Kirkham, chief engineer, were suspended for 15 days for unlawfully navigating said steamer.

September 18.—Steamer *Mohawk*, en route from New London to New York, was in collision with the three-masted schooner *Charles L. Jeffers*, also bound for New York, about 9 miles west of Falkner Island. Schooner leaked badly after collision and was taken in tow by steamer *Mohawk* as far as City Island, N. Y., and there turned over to tugboat. No lives lost and no person injured. Steamer *Mohawk* uninjured. Damage to schooner unknown. Case investigated and officers of steamer exonerated from blame.

September 25.—About 6 a. m. a hoisting fall on the fishing steamer *Quickstep* parted while hauling in seine boats after leaving dock at Bridgeport, Conn., and William Woodfine, who was in boat at the time, was thrown into the water and sunk immediately, evidently having been knocked unconscious.

October 20.—Steamer *Tennessee*, bound from New York to Fall River, Mass., was in collision with an unknown schooner when off Cockenoe Island, Conn., at 8.30 p. m., carrying away the jib boom and head stays and breaking the bowsprit of the schooner. No lives lost and no person injured. Estimated damage to steamer, $200. Case investigated and officers of steamer exonerated from blame.

October 24.—Steamer *Hastings*, bound from Brooklyn, N. Y., to New Haven, Conn , when off Long Neck Point, Conn., collided with an unknown schooner, causing steamer to be set on fire on account of overturning of lamps. An effort was made to extinguish the fire with steamer's apparatus, but fire got beyond control, and steamer was abandoned, sinking in about 20 minutes. No loss of life and no person injured. Estimated damage to steamer, $5,000. Damage to schooner unknown. Case investigated and officers of steamer exonerated from blame.

November 8.—Steamer *Annie E. Combes*, while moored at dock at Stamford, Conn., took fire in forward boiler room about 3 a. m., doing damage to the house of about $300. Cause of fire unknown, as fires were banked and there were only 10 pounds of steam on boiler at the time. No lives lost and no person injured.

December 3.—Barge *Thomas M. Righter*, coal laden, in tow of tugs *Hercules* and *H. A. Baxter*, foundered one-half mile off Southwest Ledge light, New Haven, Conn. No lives lost and no person injured.

December 3.—Barge *Virginian*, in tow of steamer *Elmer E. Keeler*, foundered in a heavy sea between Branford Beacon and Southwest Ledge light, New Haven, Conn. No loss of life and no person injured.

THIRD SUPERVISING DISTRICT.

LOCAL DISTRICT OF NORFOLK, VA.

December 30, 1905.—(Reported to Department January 3, 1906.) Steamer *Luray*, maneuvering to turn around off Old Dominion pier was blown in by strong west wind against barge in tow of tug *Hustler*, which was in the act of leaving from end of dock. Small amount of damage done to joiner work of *Luray*. No lives lost.

January 11.—Steamer *R. L. Myers* struck log at Tafts landing, 15 miles above Washington, N. C., breaking main shaft and losing propeller. No lives lost.

January 18.—Steamer *Virginia Dare* was proceeding up the harbor and struck ferry steamer *Superior* on port bow. Damage to *Superior*, about $100. No damage to *Virginia Dare*. No lives lost.

January 18.—When steamer *Alabama* was coming up to the dock in Portsmouth, tug *Carolina* with schooner in tow fouled the *Alabama's* quarter, doing slight damage to both vessels. No lives lost; no one injured. Cause of collision, a misunderstanding of whistles.

January 21.—When steamer *Radiant* was proceeding out with 2 barges in tow during thick fog, after barge collided with schooner at anchor, doing small damage to either vessel.

January 24.—While fireman of steamer *New York* was in the act of working fires, coupling let go, causing steam and hot water to flow through furnace, scalding said fire-

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—NORFOLK, VA.—Continued.

man slightly on left hand. Two other men were in the fireroom. One was seriously scalded while escaping from fireroom to main deck.

January 28.—Steamer *Delmar*, while entering Cape Charles at night, during thick fog, struck can buoy and moved it out of place. Notice was duly forwarded to the buoy department.

February 27.—At about 6.30 p. m., while steamer *Washington* was proceeding to Old Point from Norfolk, steamer struck schooner *John A. Beckerman* on port quarter, doing some damage to schooner, which was at anchor about 3 miles south from Old Point. Captain Cason, of steamer *Washington* reports gale of wind and hazy atmosphere at the time, and vessel's anchor light hid from view behind the foremast. When near enough to discern the vessel's hull he was too close to avoid a collision before steamer's headway was stopped. No lives lost, and no persons injured.

March 2.—Steamer *Apollo*, coming out of slip, struck steamer *Pioneer* on port bow, doing slight damage to *Pioneer*. No lives lost; no one injured.

March 18.—When off Thimble light, Capt. Frederick Posey, of steamer *Norfolk*, saw schooner's green light on starboard bow, and course of steamer was changed to port so as to give the schooner a wider berth. When nearly abreast the schooner kept off, striking steamer on starboard side, carrying away head gear on schooner and doing some damage to steamer's joiner work. No lives lost, and no persons injured.

March 22.—While steamer *Asher J. Hudson* was assisting schooner *Fannie Palmer* to float, parted anchor chains and got line in wheel. Before same could be removed, steamer had drifted ashore; was later floated and arrived at Norfolk on April 5. Damage estimated at $2,000. No lives lost, and no persons injured.

April 23.—At 4.30 p. m., April 23, wind heavy from northwest, while steamer *Essex* was in act of turning around, schooner *Eva Cullison*, in tow of steamer *W. W. Graham*, drifted down across her bow, doing about $90 damage to schooner. No lives lost, and no persons injured.

April 26.—While proceeding from Washington, N. C., to Tarboro, N. C., and when off Indian Creek, steamer *Shiloh* struck a snag. Vessel had to be beached to prevent sinking. No lives lost, and no persons injured.

May 21.—Steamer *Hampton*, while proceeding up Pagan Creek, overtook gasoline boat *Jean and Virginia*. Proper signals were given and answered. Steamer *Hampton* was running under reduced speed at the time, but her suction drew the *Jean and Virginia* under her counter, doing some damage to each vessel. No lives lost, and no persons injured.

May 22.—While lying at the dock at Criswell, the fireman of steamer *Norman L. Wagner*, James Drew, came on board between 2 and 4 p. m., and lay down on a box, which was same height as the rail, and it is presumed that he rolled off and was drowned. Body recovered next day. No scars or bruises on same.

May 23.—Steamer *Pennsylvania*, when backing out from dock in Portsmouth, got a log in her wheel, causing engine to stop. When in that position steamer *William J. Sewell* attempted to pass between the *Pennsylvania's* stern and a tow bound up river. The *Pennsylvania's* rudder was damaged by collision and steamer *William J. Sewell* had to be beached to prevent sinking. No lives lost, and no persons injured.

June 13.—Steamer *Volunteer*, leaving end of pier, struck steamer *Apollo* on port bow coming out of slip, breaking stem of steamer *Volunteer*. No lives lost, and no persons injured.

July 7.—When moving barge from Southgate's wharf to New York, Philadelphia, and Norfolk wharf, a skiff came out from front of Merchant and Miners Transportation Company's wharf and from behind a covered barge lying on south side of that company's dock just as the *Dorothea* was approaching. Skiff was capsized, and Sam Carter, occupant of skiff, was drowned.

July 12.—Steamer *R. L. Myers* struck a snag while proceeding up Tar River, which stove 2 planks in, and vessel was beached for temporary repairs. No lives lost; no one injured.

July 13.—Two persons were shaken overboard and drowned from motor boat, not named, by violent rocking of boat in swell of steamer *Pocahontas*. Accident occurred in James River.

July 18.—Steamer *Pokanoket* sunk at the dock during the night. Cause unknown. No lives lost; no one injured. Accident occurred at Petersburg, Va.

August 1.—Pasquotank River.—Barge *Mars* bound up river in tow of tug *Frank K. Esherick*, struck steamer *Thomas Newton*, which was bound down, causing said steamer to sink. One hundred and fifty barrels of lime in steamer's hold caught fire and vessel was burned to water's edge. Collision occurred at a bend in the river, owing to strong tide, and barge steering badly.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—NORFOLK, VA.—Continued.

August 3.—Steamer *Samuel Eccles, jr.*, backing out of dock in Norfolk Harbor, struck stem of steamer *Nita*, which was making a landing. Steamer *Nita's* stem damaged slightly.

August 22.—Elizabeth River.—While steamer *Germania* was landing with Old Dominion Steamship Company's barges 3 and 8, deck hand L. H. Goodwin, in attempting to pass from steamer to barge No. 3, fell overboard and was drowned.

August 23.—While lying at the dock at Elizabeth City, N. C., Thursday evening, steamer *Clay Foreman* caught fire, presumably by lamp explosion. Damage to vessel, about $1,600. No lives lost; no one injured.

October 8.—When entering cut at Cape Charles, Va., barge No. 9, New York, Philadelphia, and Norfolk, in tow of tug *Salisbury*, went ashore, fouling the white beacon on south side of cut, knocking it down.

October 13.—In Dismal Swamp Canal, tug *Fannie M. Gilbert*, with schooner *Julieth Hopkins* in tow, broke crank pin, causing her to stop. Schooner in tow ran up on her, carrying away smokestack and pilot house on tug.

October 20.—At Cape Henry, Va., about 7.30 p. m., steamer *George Farwell*, lumber laden, bound from Jacksonville, Fla., to New Haven, Conn., via Norfolk, for bunker coal, while trying to make Cape Henry in thick fog, and northeast wind, stranded about 1 mile south of Cape Henry light. No lives lost; not one injured.

October 22.—At Cape Charles, Va., barge No. 9, in tow of tug *Salisbury*, failed to haul in the cut behind the tug, and struck the jetty, knocking the underpinning out, causing the house on end of jetty to careen over about 40 degrees.

October 24 and 27.—Leandus M. Smith, holding master and pilots license, appeared at the local inspector's office, Norfolk, Va., under the influence of liquor and used abusive language. His conduct has been investigated.

October 30.—While lying at the dock at Elizabeth City, N. C., the entire top work of steamer *G. F. Derickson* was damaged by fire. Cause unknown.

November 2.—Steamer *J. Alvah Clark*, while backing out of New York, Philadelphia, and Norfolk slip, Norfolk Harbor, struck a New York, Philadelphia, and Norfolk car barge, which was going up the slip in tow of tug *Joseph M. Clark*, doing some damage to the *J. Alvah Clark's* joiner work and fender guard. No lives lost; no one injured.

November 3.—Norfolk Harbor.—While proceeding up the harbor on parallel courses the U. S. steamer *Virginia* sheered to starboard, causing the steamer *Monroe* to catch her suction. Vessels came together, causing some damage to both. No lives lost; no one injured.

November 7.—Captain Hudgins of the steamer *S. J. Phillips* reports that, while proceeding up from Berkley to Norfolk, in Norfolk Harbor, with barge in tow, a colored man in a skiff got under the bow of the barge, and was rescued, only slightly injured.

November 12.—In Norfolk Harbor, steamer *Gaston*, from Portsmouth to Norfolk, struck barge in tow of tug *Apollo* a glancing blow, doing slight damage to barge.

November 19.—Tug *Portsmouth* with barge in tow was proceeding down the Elizabeth River when bugeye *Todd* started to go between tug and barge. Barge struck the *Todd*, doing slight damage. No lives lost.

November 21.—Elizabeth River.—Pilot of motor boat *Florence* reports that, while proceeding up the Elizabeth River, he blew 1 blast of his whistle to motor boat *A. B. Johnson*, which was not answered, and a collision narrowly averted. Case has been investigated.

November 26.—Steamer *Jack Twohy*, proceeding up the Elizabeth River, struck the motor boat *Black Cat* on the port side, causing her to sink. No lives lost; no one injured.

November 30.—At Belhaven, N. C., fire broke out in waste locker in engine room of steamer *May Russel*, charring woodwork in engine room and fireroom. No lives lost; no one injured.

December 1.—At Norfolk, Va., a deck hand on steamer *New York*, by the name of Winsor Wooten, was caught stealing and was locked up on board the steamer to await the police. He took off hat and shoes and got out of a dead light onto the guard and jumped overboard, evidently with the intention of swimming across the slip to another dock. A boat was lowered from the *New York*, but they were unable to find him, owing to the darkness, and do not know whether or not he was drowned. Time, 9.50 p. m.

December 5.—While the steamer *New York* was lying at the dock at Cape Charles, Va., oiler named A. Page Ashby, started up dynamo, so as to see to do some painting behind the main belt wheel. His clothes caught in belt and he was instantly killed.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—NORFOLK, VA.—Continued.

December 9.—Curtis H. Page, master of steamer *Juliette W. Murray*, was reported to the collector of customs for navigating said steamer after the expiration of certificate of inspection.

December 23.—Tug *Crisfield* with barge in tow, in Norfolk Harbor, collided with steamship *Albiana* in tow of tug *Louisville*, doing some damage to the *Albiana* and barge.

December 24.—In complying with section 4453, Revised Statutes, on December 22, found boat and fire drill on steamer *Volunteer* (A. L. Cahoon, master,) unsatisfactory, and signal lights setting on saloon steps and not in metal-lined box prepared for same; also, steamer being navigated with 2 men less than required in certificate of inspection.

LOCAL DISTRICT OF BALTIMORE, MD.

January 11.—Steamer *Joppa* collided with wharf at Cambridge, Md., twisting stem of steamer. Accident due to a misunderstanding of signals. Estimated damage, $600. No lives lost. Not investigated.

January 20.—Investigated charges preferred against William Harding, mate of schooner *J. R. Teel*, of intoxication while on duty, insubordination and negligence. Found guilty, and license suspended for 4 months.

January 23.—Steamer *Anthony Groves, jr.* grounded on Plum Point, Chesapeake Bay, Md. Vessel was floated and proceeded. Estimated damage, $1,000.

March 7.—Investigated collision which occurred on December 19, 1905, between steamer *Baltimore* and schooner *Amelia M. Price*, in Chesapeake Bay about 4 miles northward of Point No Point. One man drowned. Suspended license of Howard E. Willing, pilot in charge of watch steamer *Baltimore*, for a period of 90 days for negligence. Case appealed to supervising inspector, and decision revoked.

March 19.—Charles Watkins, colored, deck hand on steamer *Northumberland*, fell overboard while endeavoring to get stern line ashore, at Lodge wharf, Va., and was drowned. Case not investigated.

March 23.—Car float in tow of tug *Rescue* collided with rowboat in Baltimore Harbor. Man in rowboat jumped overboard, but was rescued unhurt. No damage to float or boat. Case not investigated.

April 17.—Carl Green, colored, lookoutsman on steamer *Tred Avon*, disappeared from said vessel while en route on Tred Avon River, Md. Body not recovered. Case not investigated.

May 10.—Steamer *Baltimore* collided with steamer *Westmoreland* in Craighill channel, Chesapeake Bay, while passing each other bound down the bay. Estimated damage to steamer *Baltimore*, $100; to steamer *Westmoreland*, $1,300. No lives lost. Case not investigated.

May 30.—Steamers *R. B. Douglas* and *Virginia* were in collision in Chesapeake Bay off Windmill Point. Estimated damage to steamer *R. B. Douglas*, $25; to *Virginia*, $300. No lives lost. Collision due to crowded condition of the bay on account of fishing boats and nets. Case not investigated.

June 13.—Steamer *Essex* caught fire while lying at Savannah wharf, Baltimore, Md., about 2.15 a. m., from a burning scow. Steamship drifted across, filled, and grounded on south side of harbor. Estimated damage, $75,000. John Costello, Edward Atkinson, Emanuel Otero, Fred Battle, and C. Pryor, members of the crew, lost their lives. Case not investigated.

July 4.—Collision occurred between steamers *Jamestown* and *St. Johns* in Potomac River. No lives lost and no damage to either steamer. Case investigated July 14 and 16, and dismissed, with reprimand to master of each steamer.

July 23.—Investigated charge preferred against James Craig, chief engineer tug *Cumberland*, of tying down safety valve and carrying excess of steam to that allowed by certificate of inspection. Case dismissed.

July 25.—Investigated charge preferred against John McSorley, engineer tug *Little Nora*, of intoxication while on duty. Found guilty and suspended for 60 days.

July 25.—Investigated charge preferred against Benjamin F. Wilson, engineer tug *Marion Cameron*, of misconduct and intoxication while on duty. Found guilty; suspended for 30 days.

August 17.—Reported Joseph J. Sparrow, master, steamer *Wicomico*, to collector of customs, Tappahannock, Va., for violation of section 4438, U. S. Revised Statutes, for having acted as master of said steamer on July 8 without holding license as such.

August 17.—Reported Joseph J. Sparrow, master, steamer *Rappahannock*, to collector of customs, Tappahannock, Va., for violation of section 4438, U. S. Revised Statutes, for having acted as master of said steamer on August 4 without having license as such.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—BALTIMORE, MD.—Continued.

August 18.—Investigated charge preferred against John Cook, chief engineer, steamer *Dr. W. J. Newbill*, of intoxication while on duty, found guilty and suspended for four months.

September 8.—Collision occurred between steamer *Gaivota* and motor vessel *Annie Flood* in Curtis Creek, Md. No lives lost and no damage to either vessel. Case investigated September 19, and dismissed.

September 15.—Collision occurred between tug *Venus* and barge in tow of tug *Louie* in Baltimore Harbor, Md. Estimated damage to tug *Venus* $50; to barge, none. No lives lost. Case not investigated.

September 28.—Collision occurred between steamer *Vesper* and car float in tow of tug *Transport*. Estimated damage to steamer *Vesper* $100; to car float, none. No lives lost. Case not investigated.

October 13.—Investigated charge preferred against Robert H. Boston, master and pilot, of incompetency, due to defective eyesight. Dismissed.

October 13.—Investigated charge preferred against William F. Veasey, master and pilot, steamer *Virginia*, of receiving on board and transporting as freight, petroleum, without having permit for same in force. Found guilty, and suspended for 10 days.

October 19.—Motor vessel *Wm. J. Blankfard* turned over and sunk while lying at drawbridge wharf, Baltimore Harbor, Md. No lives lost and no damage to vessel. Case not investigated.

October 22.—Joseph Barlow, deck hand, tug *Venus*, fell overboard in Baltimore Harbor and was drowned. Case not investigated.

November 19.—Steamer *Alonzo H. Cushing* backed into sail vessel *Grace Bennett*, while said vessel was being docked by steamer *James O. Carter* in Washington Harbor, D. C. Sail vessel damaged $150. No damage to steamers *James O. Carter* or *Alonzo H. Cushing*. No lives lost. Case not investigated.

November 21.—Collision occurred between steamer *Joppa* and bugeye *Joseph S. Faulkner* in Chesapeake Bay about 2 miles below Seven Foot knoll, due to bugeye altering her course suddenly. No lives lost. Estimated damage to steamer *Joppa* $1,500; to bugeye, unknown, as no report was made by master of said vessel. Case not investigated.

December 14.—Tug *Columbia*, while towing an empty scow, struck a submerged obstruction, starting vessel to leak, in Patapsco River near old quarantine shore, Maryland. After docking scow the steamer foundered. Vessel afterwards raised. Estimated damage, $25. No lives lost. Case not investigated.

December 15.—Steamer *Dixie*, with barge in tow, caught fire in Chesapeake Bay near Pooles Island, Md. Estimated damage $500. No lives lost. Case not investigated.

December 23.—Collision occurred between tug *Peerless* and sail vessel *Three Sisters* in Patapsco River near Seven Foot knoll, Md., causing sail vessel to fill and sink. Crew were rescued. No damage to tug *Peerless*; to sail vessel, unknown. No lives lost. Case will be investigated.

LOCAL DISTRICT OF CHARLESTON, S. C.

March 1.—While leaving Norfolk, Va., for Charleston, S. C., the steamer *Christobal Colon* came into collision with raft in tow of tug *Teaser* on the Elizabeth River, damaging propeller of said steamer. No one injured. Amount of damage unknown.

March 2.—At about 8 p. m., just off No. 10 buoy in the Cape Fear River, while steamer *Wilmington* was making her return trip to Southport, a small boat, containing 2 men, in attempting to cross the *Wilmington's* bow, was struck, 1 of the men climbing on board the steamer *Wilmington*. A boat was lowered and search made for half an hour for the other man, but without avail.

March 3.—Steamship *Navahoe* grounded on voyage out for New York in Middle Ground, inside Cape Fear Bar, N. C., during southerly gale and heavy rain squalls which struck her at this point, shutting out all the range lights and occasioning the grounding before she could be anchored. Cargo was lightered, vessel floated on March 9, with no apparent damage to hull, reloaded and resumed voyage.

March 16.—While steamer *Tar Heel* was on her regular trip from Wilmington, Harrison Cromartie, colored, aged about 30 years, a deck hand on the above steamer, fell overboard and was drowned. The steamer was stopped and boat lowered, but he sunk before he could be reached.

March 22.—At about 8 p. m., a deck hand on the steamer *A. J. Johnson* was knocked overboard by the parting of a tow line and drowned. A boat was lowered and every effort made to save the man, but the attempt proved unsuccessful.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—CHARLESTON, S. C.—Continued.

April 17.—In attempting to obtain a pilot from the steamer *C. W. Lyon* about 3.30 a. m., the steamer *Tar Heel* collided with the former, her guard from stem to side house on port side being torn off, and a fireman slightly injured by being thrown against the capstan. The collision was occasioned by high wind at the time. Amount of damage unknown.

April 21.—About 1 mile above the mouth of the Waccamaw River the tug *Wm. P. Congdon* ran into a row boat containing 5 persons, all colored, viz, 3 men, 1 boy, and 1 girl; the latter and one man being drowned. The remaining 3 were rescued by the steamer. The night was dark and hazy and the row boat carried no light.

April 22.—While tied up alongside of a lighter at Bennetts Point wharf, about 1.30 a. m., the steamer *Nannie B* sunk and a deck hand, only known by the name of "Frank," is supposed to have gone down with the steamer and drowned. Amount of damage unknown.

April 30.—Jefferson D. Bradshaw, master and pilot, violated the provisions contained in the certificate of inspection of steamer *C. W. Lyon* by navigating said steamer beyond the number of hours allowed by the certificate of inspection with single crew. Case investigated and license suspended for 1 day.

April 30.—Bryant Jones, chief engineer (inland), violated provisions contained in certificate of inspection of steamer *C. W. Lyon* by operating said steamer exceeding the number of hours fixed in said certificate of inspection. Case investigated and license suspended for 1 day.

May 6.—While steaming up the Stone River under full speed, a passenger by the name of Leon Vorse fell overboard from the steamer *Lotta* and was drowned. A boat was promptly lowered and every effort made to rescue him, but he sunk before assistance could reach him.

May 26.—About 11 p. m., Isaac Butler, colored, watchman on the steamer *Protector*, Charleston, S. C., fell overboard and was drowned.

June 8.—Steamer *Lillie* was totally destroyed by fire on the night of June 8, cause unknown, while lying at a wharf at Southport, N. C. Loss estimated at $7,000.

July 8.—Steamer *Duplin* struck a snag in the North East River, N. C., and sunk. Damage unknown.

July 11.—R. McIver Ervin, of Florence, S. C., traveling under the assumed name of V. Gutierez, a passenger on the steamer *Apache*, was missed on the morning of July 12. The last seen of him was about midnight, July 11, sitting on a chair outside his room, which was located on the upper deck.

July 27.—A new deck hand employed on the steamer *A. J. Johnson* was drowned at Wilmington, N. C., while unloading cargo at a wharf. A passing vessel caused the steamer *A. J. Johnson* to rock, and the new deck hand, who stood gazing, lost his balance and fell overboard. Every effort was made to rescue him, but he never rose to the surface.

August 13.—While the steamer *Sea Gate* was preparing to leave for Southport, N. C., two elbows were blown off her pipe boilers, scalding the fireman.

August 20.—Paul Hann, of Mussle Harbor, Newfoundland, who shipped from Boston, Mass., as fisherman, March 10, 1906, accidentally fell overboard from stern of steamer *Montauk*. The vessel was immediately stopped and every effort made to rescue him, but without success. Owing to the depth of the water and the strong current the body could not be recovered. The accident occurred about 2 miles off Little River, N. C.

August 21.—About 10.45 p. m., fire was discovered in the fire room and boiler hatch of the steamer *Planter*. Owing to the inflammable nature of the material burnt, considerable damage was done before getting the fire under control. Loss $3,000.

September 13.—Yan Gresan, 16 years old, mess boy on the steamship *Shawmut*, was lost overboard about 30 miles northeast by east from Cape Lookout light-ship.

September 17.—While lying at a wharf at Charleston, S. C., the sea washed over the stern of the steamer *Daniels Island* during a gale, the vessel being sunk. No lives lost. Damage unknown.

September 21.—Steamer *Navahoe*, bound up the Cape Fear River, collided with the steamer *Atlantic*, bound out. The collision took place off Battery Island. The *Atlantic* was cut down and sunk immediately. No lives were lost. The loss has been estimated at $40,000.

September 21.—Charles M. Hale, master and pilot of steamship *Navahoe*, violated Rule I of the pilot rules for the inland waters of the Atlantic and Pacific coasts. Case investigated and license suspended for 30 days.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—Continued.

LOCAL DISTRICT OF SAVANNAH, GA.

February 20.—Steamer *Swan* sunk in Savannah River 18 miles west of Savannah. When leak was discovered steamer was put on sand bar and passengers taken off. No loss of life. Steamer raised and again in service.

July 23.—Steamers *Chattahoochee* and *City of Memphis* collided in Savannah River while outward bound. No loss of life and no estimate of damage. Case investigated and license of master of the *Chattahoochee* suspended 30 days and license of master of *City of Memphis* suspended 15 days.

December 10.—License of Walter Estill, engineer, revoked on account of statement relative to experience.

LOCAL DISTRICT OF JACKSONVILLE, FLA.

January 25.—Capt. Joseph E. Lucas, master steamer *Harry Lee*, charged William Ray, engineer in charge, with drunkenness and burning boiler of said steamer. Case investigated and charges sustained. License suspended for 1 year from date, for violation of section 4450, U. S. Revised Statutes.

February 11.—Heavy sea boarded steamship *Roma*, W. F. Berg, master, and injured carpenter and 1 sailor. No assistance required. Vessel proceeded to Marcus Hook, arriving at 1.50 a. m., February 16. Men improving from injuries received.

February 12.—3.30 a. m., while 35 miles south of Cape Canaveral, tug *Dauntless*, W. T. Lewis, captain, with 3 barges in tow, encountered severe storm, which stove in forward house. Sea swept over tug, causing all 3 barges to break away, which were a total loss. Tug returned to Miami for repairs. No lives lost.

February 13.—At 1.35 p. m., steamer *St. Lucie*, S. A. Bravo, master, broke crank pin on port side, causing piston to come back with such force as to break both cylinder heads. Port engine was disconnected and started on 1 engine. Steamer returned to Miami, arriving at 6.10 p. m. Prior to accident the engines were running smoothly.

February 21.—About 6.30 p. m. launch *Kernwood*, from City Point, Fla., in charge of C. E. Middleby, attempted to cross bow of ferry steamer *Palm Beach* and was struck amidship, tearing a hole 2 feet 6 inches long in port side. Launch was towed to east side landing by ferry before it sunk. Damages to *Palm Beach* very slight. Launch had no lights. Night was very cloudy and dark. Mr. Middleby assumes all responsibility.

March 12.—Capt. Joseph E. Lucas, master of steamer *Harry Lee*, while collecting fares was attacked by a negro passenger and his life was threatened to such an extent that he was compelled in self-defense to kill the passenger, named Sankey Campbell, who was formerly a deck hand. Coroner's jury acquitted the captain on grounds of justifiable homicide.

March 13.—About 7 a. m. passenger steamer *Alligator* struck a snag abaft of engine room just above Heather Island and sunk in 5 feet of water. All the crew and passengers were saved, and carried to Silver Springs in small boats. No lives lost. Approximate damage, $500. Allen Gibson, master.

March 26.—At 9.30 p. m., the steamer *Virginia*, J. F. Dill, master, while backing out of Manatee Creek struck a snag, breaking small hole in bottom of vessel. Same was temporarily repaired and vessel will be hauled out and thoroughly repaired before again going into commission. Damage very slight.

April 4.—About 6 p. m. H. B. Fielder, second assistant engineer on tug *Bertha Ritter*, fell overboard and was drowned near Mitchell's Cove, Fla., 3½ miles north of Jacksonville, on St. Johns River, Fla. The tug had tow in charge and when near Mitchell's Cove the tow commenced to sheer. Mr. Fielder, while walking on deck to ascertain cause of trouble, fell overboard and was drowned. Body not yet recovered. Lawrence D. Thorne, master.

April 6.—At 12.25 p. m. steamer *Heck*, William J. Black, master, soon after leaving dock, foot of Ocean street, had plug in tube of boiler to blow out, scalding engineer Terrell and fireman Palmer about face. Plug had just been placed in boiler early in the day by Merrill-Stevens Company, account of leak. Engineer Terrell was sent to hospital and fireman Palmer sent home.

April 27.—About 9.30 p. m., while steamer *Biscayne*, F. S. Sabate, master, was near Florida East Coast Railway camp No. 7, off Grassey Key, Fla., Henry Johnson, colored, who had been sitting on wood pile aboard the steamer, fell overboard and was drowned. It is impossible to ascertain whether it was accidental or whether he was knocked overboard by some of the employees for the purpose of robbing him of what money he had on his person.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—THIRD SUPERVISING DISTRICT—JACKSONVILLE, FLA.—Continued.

May 5.—Towing steamer *Red Wing*, Calvin E. Knight, master, sunk at Nelsons & Sons mill, at Boggy Creek, on Nassau River, Fla. Sinking being caused by towboat hanging on the guard of a lighter. Steamer will be raised. No lives lost. Damages supposed to be nominal.

May 17.—At 10.30 a. m., while steamer *Ruby*, Marvin W. Long, master, was towing lighter loaded with lumber up Nassau River, when just north of Nassau bridge, one Vanderbilt Hicks, deck hand, endeavored to make line fast on lighter, when lumber commenced to fall and crushed him to death. Everything possible was done for his relief, but to no avail.

June 5.—George Brown and one Williams, both colored, were employed as deck hands on steamer *William Howard*, H. C. Hammant, master. While boat was at Palatka, Fla., crew were drinking, and a quarrel ensued between the two deck hands. George Brown murdered Williams by almost severing his head from body with an ax. Authorities are now trying to locate George Brown. Murder was committed about 10.30 p. m.

June 11.—About 4 a. m., steamer *Fearless*, W. S. Cone, master, sunk at Colee, Fla., 2½ miles from Picolata, Fla., on St. Johns River, from cause unknown. Vessel will be raised at once. No lives lost. Damage to vessel very slight.

June 19.—Steamer *City of Jacksonville*, Thomas Creaser, master, bound from Palatka, Fla., to Jacksonville, Fla., on St. Johns River, collided with beacon off Racey Point at 1 a. m. Cause for same was that beacon was not lighted. No damage to steamer.

July 3.—About 10.15 p. m., on steamer *St. Lucie*, S. A. Bravo, master, crank pin on starboard engine broke, blowing out both cylinder heads. Vessel anchored for the night, proceeding to Miami, Fla., next morning. No further damage done; no lives lost.

July 26.—Tug *Sybil*, Dan Ross, master, was towing 2 barges from Jacksonville to Miami, Fla., when both furnaces dropped. Barges were anchored and tug returned to Jacksonville under reduced pressure for repairs.

June 9.—Charges preferred by Capt. Joseph E. Lucas, master, steamer *Lavinia*, against Edward S. Bennett, engineer in charge of boiler and machinery of same steamer, for intoxication. Investigated case August 7, 1906; charges sustained, and license suspended for 161 days from August 10, 1906, inclusive.

August 15.—While steamer *Peerless*, W. T. Campbell, master, was towing barges in west channel of Jew Fish Creek, Munroe County, Fla., 500 yards north of Jew Fish station, one George Levi, colored deck hand, fell overboard and was drowned. Body recovered later.

September 4.—Steamer *Lavinia*, Joseph E. Lucas, master, sunk in St. Johns River at Palatka, Fla., from cause unknown. The water was very shallow, and vessel will be raised immediately. No lives lost; damages nominal.

October 14.—About 3.45 a. m., steamer *Wanderer*, F. L. Moody, master, sunk in 6 feet of water while tied to bank in Jew Fish Creek, near Miami, Fla., from a leak, the location of which has not yet been determined. The extent of damage is very light, and steamer will be raised at once. No persons injured.

October 18.—Passenger steamer *St. Lucie*, Stephen A. Bravo, master, left Miami, Fla., October 17, at 6.50 p. m., bound for Florida East Coast extension, with 24 crew and 73 passengers aboard. Foundered at Elliotts Key, Fla., about 9 a. m., October 18, during hurricane. Passengers and crew safely landed on Island. Steamer total wreck.

November 25.—Steamship *Iroquois*, I. K. Chichester, master, left Charleston, S. C., November 24, bound for Jacksonville, Fla. A lady giving name as Amelia Browning was passenger aboard. Was last seen at 2 a. m., November 25. Upon arrival at this port could not be located. Investigation indicated bed not occupied. Supposition is she committed suicide shortly after being seen.

FOURTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF ST. LOUIS, MO.

April 7.—An unknown passenger jumped overboard from the ferry steamer *Henry L. Clark* as the steamer was leaving her landing at East St. Louis, Ill., and was drowned. Every effort was made to save him, but without avail.

May 30.—John Reed and Robert Fitzpatrick, colored deck hands on steamer *City of Providence*, fell overboard and were drowned. The steamer was stopped, lifeboats

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FOURTH SUPERVISING DISTRICT—ST. LOUIS, MO.—Continued.

lowered, but no trace could be found of them. Accident occurred near Jefferson Barracks, Mo.

June 4.—While the steamer *City of Providence* was making a landing at Alton, Ill., she was caught in a squall and blew against several small yachts, damaging the latter to the extent of about $300. No lives lost; no persons injured.

June 9.—Eli Fisher, colored fireman on steamer *Reliance*, fell overboard and was drowned. Every effort was made to save him.

July 7.—Charges were preferred against chief engineers Charles Jackson and Robert Critchfield for violation of sections 4441 and 4448, Revised Statutes. Investigation held same date and case dismissed.

July 26.—Mamie Yung, passenger on steamer *City of Providence*, jumped overboard near St. Louis, Mo., and was drowned. The body never came to the surface, and it was evidently a case of suicide.

August 8.—The license of Charles J. Hall, assistant engineer, was suspended for a period of 60 days for intemperance. This violation came under our immediate observation.

August 21.—The steamer *Susan* left the port of Omaha, Nebr., without a licensed engineer, in violation of section 4463, Revised Statutes. Case was reported to the U. S. district attorney and surveyor of customs. The license of the officer in charge, Edgar Schofield, master and pilot, was suspended for a period of 60 days.

October 13.—Steamer (not named) was found navigating the Kaw River at Kansas City, Kans., without having been inspected or complying with the provisions of Title LII of the Revised Statutes. Steamer was operated by Charles C. Davis, owner, without a license of any kind. Cases have been reported to the U. S. district attorney and surveyor of customs.

October 22.—The license of Frank S. Meyers, master and pilot, was suspended for a period of 30 days for violation of section 50, Rule V, of the rules and regulations.

October 22.—The license of Byrd Burton, master, was suspended for a period of 10 days for violation of section 50, Rule V, of the rules and regulations.

November 12.—Charges were preferred against H. N. Dodd, master and pilot, for intemperance. Case investigated same date and charges not sustained.

November 23.—Evidence of negligence on the steamer *Peoples Ferry* coming under the observation of the supervising inspector was the cause of charges being preferred against Charles Saussman and George B. Goodman, chief and assistant engineers of the vessel, for violation of section 4441, Revised Statutes. Case investigated and charges sustained. The licenses of both engineers this day revoked.

FIFTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF DUBUQUE, IOWA.

February 15.—While out of commission, at Albany, Ill., steamer *Maine* sunk from some unknown cause and was damaged by ice, wind, and water to the extent of $1,200.

April 5 to 7.—Motor boat *J. H. Keene*, on Missouri River, in charge of Pilot Harry Yocum, charged with carrying passengers in excess of the number permitted by inspection certificate. Case reported to U. S. district attorney.

May 7.—Steamer *Eagle Point*, while ascending Mississippi River near Cassville, Wis., struck a snag and sunk in about 7 feet of water. Vessel has since been raised. Damage estimated at $1,000.

June 3.—While steamer *Helen Blair* was navigating Mississippi River near Fairport, Iowa, W. V. Marlin, a seaman on said steamer, and who had been drinking freely, fell overboard and was drowned. Steamer was stopped and a lifeboat lowered and sent to aid him, but he went down before they could reach him.

July 11.—Steamer *Quincy*, while ascending the Mississippi River near Trempealeau, Wis., about 10.20 p. m., suddenly took a sheer on the pilot, ran into the shore and struck a submerged stump, knocking a hole in her hull below the water line, allowing her to fill with water and sink in about 20 feet of water. All the passengers who desired to leave the boat were taken ashore in lifeboats. No lives lost or persons injured. Vessel was raised and is being repaired. Damage estimated at $20,000.

July 21.—Collision occurred when steamer *Helen Blair* attempted to pass steamer *J. S.* in a narrow channel in the Mississippi River about 4 miles above Oquawka, Ill. Damage slight. No lives lost and no persons injured. Case investigated July 27 and license of Albert Edwards, first-class pilot of the steamer *J. S.*, was suspended for 30 days for failure to observe the provisions of Rule VIII of the pilot rules for Western Rivers.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIFTH SUPERVISING DISTRICT—DUBUQUE, IOWA—Continued.

August 8.—While steamer *B. Hershey* was descending the Mississippi River near Dubuque, Iowa, with a tow, the keying lug on the starboard engine broke off. Damage estimated at $100.

August 14 to 25.—Motor boat *Iowa*, M. K. King, master, operating on Missouri River, was navigated from time of expiration of old certificate of inspection, August 13, up to date of receipt of new certificate, August 26. Case reported to surveyor of customs, Sioux City, Iowa, for investigation and prosecution.

August 29.—While lying up for the night at Brownsville, Minn., steamer *City of Hudson* took fire in some manner unknown, burned to the water's edge, and sunk. No lives lost or persons injured. Loss estimated at $2,000.

September 3.—While steamer *Eclipse* was navigating the Mississippi River near Davenport, Iowa, George Burke, a deck hand, accidentally fell overboard and was drowned before a boat could reach him.

September 19.—Henry F. Slocumb, master and pilot of steamer *Frontenac*, charged with navigating said steamer in violation of Rule I of the pilot rules, admitted the violation, and without further investigation his license as master and pilot was suspended from October 3, 1906, to April 15, 1907, inclusive, practically a suspension during the season of navigation of 60 days.

October 18.—Steamer *Nautilus*, navigating the Mississippi River at Burlington, Iowa, caught fire in some unknown manner and was partially destroyed. No lives lost or persons injured. Damage estimated at $750.

LOCAL DISTRICT OF DULUTH, MINN.

March 19.—John Gagnon, a special pilot of steam vessels, was charged with being intoxicated while acting under the authority of his license September 16, 1905, and at various other times Case investigated and the license of said John Gagnon was revoked April 24, 1906, for violation of section 4442, U. S. Revised Statutes.

May 1.—Steamer *E. G. Maxwell*, while towing a scow through Duluth canal piers, was damaged to the amount of about $75 by colliding with steamer *Mars*, going in the same direction. Collision was caused by scow sheering.

May 17.—Steamer *Myron* collided with steamer *Joseph G. Butler, jr.*, while shifting a couple of barges at the Duluth, Masaba & Northern ore dock at Duluth, damaging the latter steamer to the extent of $4,000. Collision was caused by the failure of steamer *Myron's* engine to respond.

June 7.—Steamer *Park Bluff* was sunk at Stillwater, Minn., by striking a submerged log. Boiler and machinery were subsequently installed in a new vessel, now named *Hariett*. Loss, $2,000.

June 17.—While steamer *Merida* was leaving Duluth Harbor she collided with barge *Antrim*, which was in tow of tugs *A. C. Adams* and *Record*, and was damaged to the extent of $1,500. Case was investigated, and the cause of collision was found to be the failure of the master of tug *Record* to comply with the requirements of Rule I, pilot rules for the Great Lakes, after signals had been exchanged. For violation of said rule, the license of William E. Hoy was suspended for 15 days.

June 20.—Capt. Thomas Beggs preferred charges against Capt. Donald Gillis, which purported to be a violation of Rule VI, pilot rules for the Great Lakes. Said charges were withdrawn October 26, 1906, and the case was dismissed.

June 21.—An unknown passenger on steamer *Italia* committed suicide by jumping overboard from the vessel when abreast of Two Harbors, Minn.

June 25.—Steamer *Robert Holland*, loaded with lumber, sunk in Duluth Harbor. Sinking was caused by the vessel being loaded so as to make it top-heavy, thereby causing the vessel to list so that she filled with water. Estimated damage to hull, $75. On June 29 the license of the master and pilot, Joseph T. Lennon, was revoked for failing to report said sinking, in violation of section 4448, U. S. Revised Statutes, and section 23, Rule V, rules and regulations. This decision was revoked on appeal to the supervising inspector of the district August 6, 1906.

June 27.—Tug *Alfred W.*, while bound from Port Arthur to Duluth, during a dense fog, struck a rock, slid off, and sunk in deep water. The vessel was subsequently raised and found to be practically uninjured.

June 29.—Ferry steamer *Swansea*, while making a trip from Duluth to Superior, was found to be leaking badly. The steamer was run into shallow water, where she sunk. The leak was caused by a hole being punctured in the hull by striking some submerged obstruction. Damage, $60.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIFTH SUPERVISING DISTRICT—DULUTH, MINN.—Continued.

July 4.—Frank D. Kane, a licensed engineer of steam vessels, was found acting as such engineer of steamer *Mary Mann* while in an intoxicated condition. His license was revoked July 12 for violation of section 4441, U. S. Revised Statutes.

July 28.—Steamer *Major Dana*, while bound from Duluth to Thomasville, Minn., fetched up on Knife Island, doing damage to the extent of about $75. The accident was due to fog.

August 1.—Steamer *Expansion*, navigating the Missouri River, was damaged to the extent of $500 by breaking crank shaft.

August 11.—Steamer *Troy* ran into the draw of the interstate bridge between Duluth and Superior, completely demolishing the draw and causing navigation to be blocked for several days. The cause of accident was the failure of draw to be opened at a reasonable time after signal had been given by vessel. Damage to steamer, $2,000.

August 21.—Steamer *Frank H. Peavey* stranded on the north shore of Lake Superior, about 10 miles north of Two Harbors, Minn. Cause of stranding unknown. Damage to vessel estimated at $15,000.

August 21.—Steamer *Mariposa* was damaged to the extent of $500 by colliding with barge *Holley* in Duluth Harbor.

September 5.—Steamer *Henry B. Smith* while making a landing at Two Harbors, Minn., collided with dock and was damaged to the extent of about $500. Accident was due to the wind.

September 6.—Steamer *John B. Cowle*, while making a landing at Duluth, Masaba & Northern ore dock at Duluth, struck the concrete end of dock, slightly damaging stem and 5 plates of vessel. Damage estimated at $500. The vessel was intending to swing in between 2 docks by the use of anchor, but chain of same became foul, which caused the accident.

October 11.—Gustav Beyle, engineer of steamer *Bun Hersey* is assumed to have accidentally fallen overboard and was drowned in the Mississippi River near St. Paul. Case investigated, and the result showed that the vessel was being navigated without the number of officers and crew specified in said vessel's certificate of inspection, a violation of sections 4453 and 4463, U. S. Revised Statutes. As a result of said investigation the license of Edwin T. Root, master and pilot of steamer *Bun Hersey* at time of casualty, was revoked for violation of sections 4453 and 4463, U. S. Revised Statutes. The owner of said vessel was also notified to correct such unlawful condition. The above decision was sustained upon appeal to the supervising inspector of the district.

October 12.—James Mullen, a seaman on steamer *James Gayley*, while ascending a ladder on the outside of vessel, accidentally fell and received injuries from which he died. Case investigated and dismissed, it having been proved that the casualty was purely accidental.

October 15.—Steamers *Sinaloa* and *Francis L. Robbins* collided while meeting near a turn at the Duluth-Superior bridge, due to the steamer *Sinaloa* failing to make the turn fast enough. Damage to steamer *Sinaloa*, $800; to steamer *Francis L. Robbins*, $1,200.

October 22.—Steamer *Corona*, between 1 and 2 o'clock a. m., caught fire and burned to the water's edge. Origin of fire unknown. Loss estimated at $5,000.

October 23.—Steamer *Kensington*, while lying at anchor in Duluth Harbor, was damaged to the extent of about $1,000 by barge 134, in tow of 2 tugs, colliding with her.

October 28.—Steamer *Merida* in some unknown manner broke her rudder. Damage estimated at $1,500.

November 1.—Steamer *Ravenna* ran into the draw of the Chicago Great Western railway bridge at St. Paul, caused by a train standing on bridge at the time and operator failing to open the draw in time. Loss, $5,000.

November 17.—Steamer *Henry C. Frick*, in entering the harbor at Two Harbors, Minn., struck a corner of the breakwater, damaging the vessel to the extent of $5,000.

November 20.—Steamer *Bun Hersey*, of Stillwater, Minn., caught fire in some unknown manner and burned to the water's edge. Loss $3,000.

December 7.—Joseph Lavadusky, employed in unloading coal from steamer *Thomas Cranage* at Duluth, was instantly killed by a bucket of coal falling on him. The bucket became detached from the hook in some unknown manner and dropped.

December 7.—Steamer *R. L. Ireland*, laden with coal, while on a voyage up Lake Superior in a snowstorm, stranded on Gull Island. She was later released and while on the way to Duluth in tow of a tug, a heavy sea was encountered, the towline parted and got in the wheel of the vessel; the rudder was broken and the vessel was helpless in the trough of the sea; the tug becoming disabled, drifted off. Another tug, the

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—FIFTH SUPERVISING DISTRICT—DULUTH, MINN.—Continued.

E. G. Crosby, which was accompanying the steamer, came alongside and took the crew aboard, except Ambrose Daniels, watchman, who was drowned in an attempt to jump from the steamer to the tug. The vessel finally arrived at the head of the Lakes on December 29, where she will be docked and repaired. The amount of damages, which will be extensive, is not known at this time.

December 27.—Steamer *Manistique* was navigated between sunset and sunrise without the signal lights as required by law, a violation of section 4233, U. S. Revised Statutes. Case was reported to the chief officer of customs at Duluth to impose the fine provided under section 4234, U. S. Revised Statutes.

SIXTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF LOUISVILLE, KY.

1905.

December 21.—While backing away from wharf at Tell City, Ind., steamer *John W. Thomas* was caught in a severe windstorm and blown against a coal fleet, breaking in her side and causing her to sink. While attempting to raise the steamer, the part that was not submerged caught fire and was totally destroyed. No lives lost. Loss, $10,100.

1906.

January 1.—Steamer *Wm. Duffy*, while making a landing at Jeffersonville, Ind., broke her water-wheel shaft. No lives lost. Damage, $1,200.

January 16.—Investigation of charges preferred against William H. Weber, chief engineer, on December 2, 1905, for violation of section 4441, Revised Statutes, for intemperance. Case dismissed for reason of charges not being sustained.

January 18.—Steamer *Alice Brown*, when near Blue River Island, Ohio River, broke her water-wheel shaft. No lives lost. Damage, $1,600.

March 15.—Charges were preferred against steamer *Cando*, A. W. Leitch, master, for violation of sections 4463 and 4477, Revised Statutes, navigating without a full complement of officers and the required number of watchmen. Investigation held April 18, and charges were not sustained.

April 18.—Hubert Blewitt, a deck hand on steamer *Emma*, fell from the top of lock wall, while the steamer was passing through lock No. 5, Green River, and was drowned.

July 7.—While the towing steamer *R. L. Aubrey* was en route up the Ohio River, near Eighteen Mile Island, with an excursion party on board, she struck a hidden obstruction and sunk. No lives lost. Damage, $200. Case investigated July 17, and the license of William B. Dougherty, pilot and officer in charge, was revoked, for violation of section 4442, Revised Statutes, and the vessel and owners were reported to U. S. surveyor of customs, Louisville, Ky., for violation of section 4417, Revised Statutes, for carrying passengers. A fine of $500 was imposed. Application was made to the Secretary of Commerce and Labor for a remission of the fine, and the same was remitted for reason that the Department decided that, in this case, there was no violation. Thereupon the license of William B. Dougherty, pilot and officer in charge, was restored.

July 10.—Charges were preferred against John D. Whittaker, assistant engineer, for violation of section 4441, Revised Statutes, intemperance and conduct unbecoming an officer, on June 12 and 17. Case was investigated July 19, charges were sustained, and the license of John D. Whittaker, as assistant engineer, was revoked.

August 19.—Steamers *Sunshine*, John H. Fink, pilot, and *E. T. Slider*, Charles A. Knight, pilot, collided in the Ohio River near Louisville, Ky. Collision investigated September 18, and the pilot's license of John H. Fink was suspended for a period of 60 days, for violation of Rule VIII of pilot rules. Mr. Fink appealed to the supervising inspector, sixth district, who, on October 30, revoked the action of the local board.

September 12.—John Davis, pantryman, steamer *Tarascon*, while intoxicated, accidentally fell overboard, near Louisville, Ky., and was drowned.

September 19.—Gasoline boat *Hanover*, while moving from her wharf at Bethlehem, Ind., struck a hidden obstruction and sunk. Boat raised with slight damage. No lives lost and no one injured.

October 10.—The water-wheel shaft on steamer *Tarascon*, for some unaccountable reason, broke when the steamer was near Enterprise, Ind. Damage, $1,500. No lives lost and no one injured.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SIXTH SUPERVISING DISTRICT—LOUISVILLE, KY.—Continued.

October 22.—Reported passenger steamer *Alys Gray*, Edward M. Mason, pilot and officer in charge, to U. S. surveyor of customs, Louisville, Ky., for violation of section 4481, Revised Statutes, not having aboard the required lifeboat capacity. The license of Edward M. Mason, pilot and officer in charge, was suspended for a period of 15 days for violation of section 4442, Revised Statutes.

October 30.—Reported gasoline boats *Messenger*, of 30 gross tons, and *Ben R*, of 24 gross tons, and Frank B. Rounds, owner, to U. S. district attorney, Indianapolis, and surveyor of customs, Evansville, Ind., for navigating and carrying freight and passengers for hire in violation of section 4426, Revised Statutes, said vessels not having been inspected.

LOCAL DISTRICT OF EVANSVILLE, IND.

1905.

November 16.—Steamer *Frances*, Charles F. Breidenbach, pilot, and steamer *Thomas Parker*, Charles Kirk, pilot, collided in Green River, resulting in slight damage to barges in tow of both steamers. Case investigated January 20, 1906, and the officers of both steamers were exonerated.

December 25.—While steamer *Thomas Parker* was en route up the Ohio River, between Mount Vernon and Evansville, Ind., Allen Burdett, a deck hand, fell overboard and was drowned.

1906.

January 2.—While steamer *Frank* was en route down the Mississippi River at O'Bryan's landing, near Cairo, Ill., from some unexplained cause, filled with water and sunk. No lives lost. Steamer total loss. Value, $2,000.

January 9.—Steamer *Frances*, Charles F. Breidenbach, pilot, and steamer *J. B. A.*, Claude DePray, pilot, collided in the harbor at Evansville, Ind., January 5, resulting in slight damage to the steamer *J. B. A.* Case investigated February 3, and the pilot's license of Charles F. Breidenbach was suspended for a period of 90 days for violation of Rule I of Pilot Rules for Western Rivers. Mr. Breidenbach appealed February 15 to the supervising inspector, sixth district, who, on February 27, sustained the decision of the local inspectors.

January 23.—While steamer *Anna L.* was en route on the Wabash River, near New Harmony, Ind., Hays Hancock, a deck hand, fell from a barge in tow and was drowned before assistance could be rendered.

March 24.—While steamer *John A. Wood* was making a landing in the harbor at Cairo, Ill., the pilot wheel became unmanageable, breaking Capt. Harry B. Green's leg. Amputation was necessary, which resulted in the death of Captain Green.

April 15.—The passenger steamer *Louisiana*, en route down the Ohio River, with an excursion party on board, ran into the bank at Newburg, Ind., damaging steamer to extent of $3,000. Investigation held May 31, resulting in revoking the license of William J. Briscoe, pilot, and suspending, for a period of 90 days, the license of William H. Morgan, master. Captain Morgan appealed, June 4, to the supervising inspector, sixth district, who, on June 8, revoked the action of the local inspectors in suspending his license.

April 25.—Charges were preferred against Claude DePray, pilot of the steamer *J. B. A.*, for violation of Rules II and VII of Pilot Rules for Western Rivers, on January 5. Case investigated May 10, at Evansville, Ind., and charges were not sustained.

April 28.—Reported steamer *Martha H. Hennen*, Martha H. Hennen owner, to U. S. district attorney, Indianapolis, Ind., and surveyor of customs, Evansville, Ind., for navigating on expired certificate of inspection on April 26 and 27, in violation of section 4417, Revised Statutes.

April 28.—Suspended for a period of 30 days the license of William H. Edwards, master and pilot, for navigating steamer *Martha H. Hennen* on an expired certificate of inspection, in violation of section 4417, Revised Statutes.

May 2.—Steamer *Jessie B*, while lying at the bank at Fairview, Ill., was capsized by a severe windstorm, breaking hull in two and resulting in a total loss. Value, $3,500. No lives lost.

May 29.—Joseph E. Conlon, master and mate, appeared at the office of the local inspectors in a drunken condition; and, in consideration of his past intemperate and unreliable habits, his license was revoked.

July 25.—Clarence Wittmer, age 9 years, accompanied by his father on an excursion on steamer *Jewell*, near Evansville, Ind., fell overboard and was drowned.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SIXTH SUPERVISING DISTRICT—EVANSVILLE, IND.—Continued.

August 3.—Charges were preferred against Guy Mallory, first-class pilot on steamer *Wash Honshell*, for acting as pilot, outside the territory prescribed on his license, at various times during the months of July and August, in violation of section 4442, Revised Statutes. Case investigated on September 17, and charges were not sustained.

September 17.—Charges were preferred against Isaac W. Brooks, master of towing steamer *Charlotte Boeckeler*, on July 28, for violation of section 4417, Revised Statutes, carrying passengers for hire. Case was investigated and charges were not sustained.

October 3.—While steamer *Maunie* was moored to Eckels landing, Ohio River, near Grand Chain, she foundered during a severe windstorm. No lives lost. Value, $1,000; total loss.

LOCAL DISTRICT OF NASHVILLE, TENN.

1905.

December 29.—The steamers *Castalia* and *Pavonia* collided in the Ohio River at Paducah, Ky., resulting in the sinking of barge in tow of steamer *Pavonia*. No loss of life and no persons injured. Damage, $200.

1906.

February 10.—Steamer *Henry Harley* was struck by a gale of wind, causing her to strike the bluff at Buffalo, Tenn., on the Cumberland River, February 1, 1906, breaking hole in side and sinking in 8 feet of water. Steamer was raised and repaired. No loss of life. Damage, $2,000.

February 13.—Suspended license of John L. Young, first-class pilot, for a period of 90 days for intemperance. This violation came under our immediate observation February 10.

February 13.—Suspended license of Edward Lannom, mate, for a period of 30 days for intemperance. This violation came under our immediate observation February 11.

February 15.—Revoked the license of Frank H. Tyler, assistant engineer, for intemperance. This violation came under our immediate observation February 11.

February 19.—Investigated cause of collision which occurred between steamers *Castalia* and *Pavonia* in the Ohio River at Paducah, Ky., on December 29, 1905, resulting in the sinking of barge in tow of steamer *Pavonia*. Evidence showed that Charles Davis, first-class pilot on steamer *Pavonia*, was responsible for the collision. Charges were preferred against Davis for violation of rules and regulations governing pilots. The accused pleaded guilty, submitted his case, and admitted that he was drunk on watch. His license as first-class pilot was revoked.

March 31.—Reported steamer *Chancy Lamb*, John E. Gann, master and pilot, to the U. S. district attorney and surveyor of customs for navigating on an expired certificate of inspection on March 30, 1905, in violation of section 4417, Revised Statutes.

April 2.—Suspended, for a period of 30 days, the license of John E. Gann, master and pilot, for navigating the steamer *Chancy Lamb* on March 30 on an expired certificate of inspection in violation of section 4417, Revised Statutes.

May 2.—Charges were preferred against William E. Bell, first-class pilot on steamer *H. W. Buttorff* on April 23, 1906, for leaving said steamer without good cause just prior to her departure in violation of sections 4442 and 4449, Revised Statutes. Accused pleaded guilty and his license as first-class pilot was suspended for a period of 90 days.

May 5.—Charges were preferred against Linn C. Moss, first-class pilot on steamer *H. W. Buttorff* on April 23, 1906, for leaving said steamer without good cause just prior to her departure in violation of sections 4442 and 4449, Revised Statutes. Accused pleaded guilty and his license as first-class pilot was suspended for a period of 90 days.

September 19.—Charges were preferred against Isaac H. Lambert, first-class pilot on gasoline boat *White Oak* on July 2, 1906, for violation of sections 4442 and 4449, Revised Statutes. On date set for investigation, September 18, the accused pleaded guilty, and his license as first-class pilot was suspended for a period of 90 days.

September 19.—Charges were preferred against James Womble, chief engineer, on March 17, 1906, for violation of section 4441, Revised Statutes, for intemperance and leaving steamer *Almande* with fires under her boilers. On date set for investigation, September 18, the accused pleaded guilty, and his license as chief engineer was suspended for a period of 90 days.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SIXTH SUPERVISING DISTRICT—NASHVILLE, TENN.—Continued.

September 21.—Charges were preferred against John Furnan, first-class pilot, on August 24, 1906, for violation of section 4446, Revised Statutes. Accused pleaded guilty on September 16, and the matter was reported to the U. S. district attorney and surveyor of customs for disposition.

October 9.—Steamer *John S. Hopkins* was partially destroyed by fire while lying at the bank at Paducah, Ky. Fire started under pilot house, destroying pilot house and texas. No loss of life. Damage, $1,500.

November 5.—Steamer *Shiloh* struck a hidden obstruction while backing out from Kellys landing, Tenn., on Tennessee River, shivering several planks in bottom and causing steamer to leak badly. The steamer proceeded to the ways at Paducah, Ky., for repairs. Damage to property, $800. No loss of life.

November 12.—The license of Jefferson J. Saltzman, assistant engineer, was revoked for negligence in permitting the boilers of the steamer *John W. Love* to burn and become in bad condition. This violation came under our immediate observation.

November 23.—The steamer *City of Loudon* was totally destroyed by fire while lying at the bank at Florence, Ala. Origin of the fire unknown. No loss of life. Loss, $2,000.

December 3.—Charges were preferred against William T. Jordan, chief engineer, on October 24 for violation of section 4441, Revised Statutes, and section 21, Rule V, rules and regulations, for negligence in permitting the boilers and machinery on steamer *Lizzie B. Archbold* to become in bad condition. Case was investigated at Paducah, Ky., and charges were not sustained.

December 10.—Suspended for a period of 29 days the license of James H. Christley, assistant engineer, for violation of section 4441, Revised Statutes, for intemperance. This violation came under our immediate observation.

December 16.—Fred Woodman, laborer on log barge in tow of steamer *Almande*, fell overboard from barge at Coon Creek, Tennessee River, and was drowned. Every effort was made to save the unfortunate man, but without avail. His body was recovered.

LOCAL DISTRICT OF MEMPHIS, TENN.

January 8.—Reported towing steamer *City of Idaho*, O. H. Kennedy, master, to the U. S. district attorney and surveyor of customs at Memphis, Tenn., for carrying passengers for hire in violation of section 4417, Revised Statutes.

January 22.—Steamer *Rees Lee*, en route from Cincinnati, Ohio, to Memphis, Tenn., struck a hidden obstruction near Tiptonville, Tenn., and sunk. No lives lost. Value, $32,000. Total loss.

February 15.—Steamer *Blanche* burned while lying at the wharf at Hickman, Ky. No lives lost. Value, $1,000. Total loss.

February 19.—John C. Wihs, a deck hand, fell overboard from steamer *Dolphin No. 3* at Wildwood landing, Ark., and was drowned.

May 9.—Charles H. Wiseman, engineer on steamer *Victor*, was caught in the machinery of the boat and fatally injured. Was removed to Marine Hospital, Memphis, Tenn., and died May 11.

May 14.—License of William H. Conner, chief engineer, was suspended for a period of 40 days for intemperance. Violation of section 4441, Revised Statutes. This violation came under our immediate observation at Memphis, Tenn., May 7.

May 18.—Investigated charges filed against the towing steamer *Mary D*, W. F. Bishop, master, on February 19, for violation of section 4417, Revised Statutes, carrying passengers for hire. Charges not sustained and case was dismissed.

May 23.—Frank Poak, a deck hand on steamer *C. E. Taylor*, fell overboard and was drowned near Pocahontas, Ark.

July 16.—Steamer *Caruthersville*, at island No. 21, Mississippi River, broke her water-wheel shaft. Damage, $250. No lives lost.

July 31.—Mr. Hugg, a passenger on steamer *Kate Adams*, en route from Memphis, Tenn., to Arkansas City, Ark., was found to be missing from his room and is believed to have fallen overboard and drowned.

August 27.—Oscar Stephens, a deck hand on steamer *Hosmer*, fell overboard at Pendleton, Ark., and was drowned.

September 14.—W. J. Stewart, a passenger on steamer *Georgia Lee*, while en route between Memphis and Chickasaw landing, Tenn., fell overboard and was drowned at island No. 40. A lifeboat was lowered and every effort possible made to rescue the unfortunate man, but without avail.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SIXTH SUPERVISING DISTRICT—MEMPHIS, TENN.—Continued.

September 18.—Steamer *Lucille Nowland*, when near Cottonwood ledge, La., broke her pitman straps and port engine. Damage, $800. No lives lost.

September 21.—Steamer *City of Savannah*, when near Fulton, Tenn., broke her main shaft. Damage, $2,000. No lives lost.

October 9.—Investigated charges preferred against James A. Couch, master, steamer *C. H. Hugo* for violation, section 19, Rule V, rules and regulations, failure to exclude passengers from pilot house. Charges not sustained. Case dismissed.

October 10.—Steamer *Roy* sunk at Poplar Bluff, Mo., while undergoing repairs. Damage unknown. Steamer will be raised. No lives lost.

October 15.—While steamer *Sadie Lee* was lying at the wharf at Memphis, Tenn., George Rivers, a deck hand, fell overboard and was drowned.

October 28.—About 9.45 a. m. steamer *Charley Curlin* burned while lying at wharf at Caruthersville, Mo. No lives lost. Boat total loss. Value, $5,000.

November 10.—Will Stevens, a deck hand on steamer *Minnehaha*, fell overboard and was drowned near Black Rock, Ark.

November 18.—A barge loaded with cotton, in tow of the gasoline boat *Peerless*, when near the mouth of White River struck a hidden obstruction, causing the cargo to slide into the river. Damage to cargo, $1,500. No lives lost.

November 21.—Jim Craig, a deck hand on steamer *J. N. Harbin*, fell overboard and was drowned near White Hall landing, Ark., Mississippi River.

December 3.—Steamer *Twins* was destroyed by fire at Gainers ferry near Batesville, Ark. Damage, $2,500. No lives lost.

December 11.—George Smith, a deck hand on steamer *Lillian H.*, fell overboard and was drowned, at Fox Island, Mississippi River.

December 24.—Reported the gasoline boat *Dixie*, of 15 gross tons and less, Joe Eashman in charge, for navigating and carrying passengers for hire without a licensed operator in charge, in violation of section 4426, Revised Statutes.

SEVENTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF CINCINNATI, OHIO.

January 11.—Samuel Bruner, deck hand on steamer *Exporter*, fell overboard and was drowned while steamer was ascending the Ohio River, near Coney Island, Ohio.

January 21.—Rollin D. Akin, master of steamer *Swan*, accused of negligence and inattention to his duties, pleaded guilty, and his license was suspended for a period of 60 days.

March 17.—George Richards, deck hand, fell overboard from the steamer *Courier* at the wharf at Cincinnati, Ohio, and was drowned.

March 27.—Wm. T. Jones, chief engineer, steamer *Ada V.*, accused of violation of section 4446, Revised Statutes, pleaded guilty; license revoked.

April 19.—Edward Robertson, fireman on steamer *Harvester*, jumped into the Ohio River near Augusta, Ky., and was drowned.

May 18.—Steamer *Thealka*, while descending the Big Sandy River, at Red House, Ky., hit an obstruction and sunk. No damage to passengers or cargo.

July 18.—Joseph Kale, a colored deck hand, fell overboard from steamer *Lizzie Bay*, at Bellevue, Ky., and was drowned.

October 20.—George Thompson fell overboard from steamer *Enterprise*, at head of Manchester Island in the Ohio River, and was drowned before assistance could reach him.

LOCAL DISTRICT OF PITTSBURG, PA.

1905.

November 29, 1905 (reported January 16, 1906).—While steamer *Valiant* was lying at Snyders landing, Pittsburg, Pa., on the Ohio River, hitching up a tow, John Morris, a deck hand, fell off the fleet and was drowned.

1906.

January 11.—While the steamer *Cascade* was backing up the Ohio River she grounded below the Pittsburg Union bridge, mashed a hole in her bottom planking, and sunk. No loss of life or injury to person. Steamer was raised and put in commission. Estimated damage, $1,500.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SEVENTH SUPERVISING DISTRICT—PITTSBURG, PA.—Continued.

January 17.—Rendered decision in case of investigation as to cause of collision between steamers *P. M. Pfeil* and *Slackwater*, which occurred at lock No. 2, Monongahela River, October 27, 1905. Suspended the license of Abraham L. Forsyth, pilot of steamer *P. M. Pfeil*, for a period of 10 days for unskillfully navigating his steamer.

January 18.—Steamer *Andrew Axton* while backing out into the Monongahela River from a landing, about 10.20 a. m., was discovered to be on fire. After a futile effort to extinguish the flame the steamer was beached at Duquesne, Pa., and totally burned. No loss of life or injury to person. Estimated loss of steamer, $20,500.

January 27.—Steamer *Harry P. Jones*, while laid up for the night at Braddock, Pa., on the Monongahela River, was discovered on fire about 9.30 p. m. The flames were extinguished. Damage to steamer and rigging, $580.

February 2.—Rendered decision in case of investigation as to cause of collision between steamers *Bertha* and *John F. Klein*, which occurred at Little Redstone mines, Monongahela River, November 4, 1905. Suspended the license of Thomas Boland, master and pilot of steamer *John F. Klein*, for a period of 15 days, for violation of Pilot Rules I and VII.

February 5.—Fireman Charles Justice filed charges against engineer John W. Lane for carrying excess pressure of steam on the boilers of steamer *H. P. Dilworth*. An investigation was held, and the local board being unable to agree the evidence in the case was submitted to the supervising inspector, seventh district, who rendered a decision, suspending the licenses of John W. Lane, as chief engineer, and Thomas B. Hoge, as master and pilot, for a period of 5 months each, from March 15, 1906. Case was returned to district attorney, who decided the evidence insufficient to warrant prosecution.

March 1.—While steamer *J. O. Watson* was descending the Monongahela River above lock No. 5, Boloslow Conanshansky, a passenger, under the influence of liquor, fell overboard about 4.30 p. m. He was pulled out of the water, but could not be revived.

March 3.—Steamer *Eleanor*, ascending with an empty tow, and steamer *T. J. Wood*, descending with a loaded tow, collided near Apollo mines on the Monongahela River, slightly damaging the tow of the latter steamer.

March 10.—Steamer *Tom Lysle*, ascending the Monongahela River with an empty tow, sprang a leak in her hull, turned on her side, and sunk at Braddock, Pa., about 3.45 p. m. Christine Dempsey, chambermaid, while being taken off the boat, was crushed to death between steamer and tow. Steamer was wrecked and abandoned. Estimated loss, $12,000.

March 10.—While steamer *Rival* was ascending the Ohio River, opposite Allegheny, Pa., about midnight fireman John Delaney, while under influence of liquor, fell overboard and was drowned.

March 16.—Steamer *Charles Brown*, while lying at Allegheny, Pa., on the Ohio River, took fire about 1 a. m., and was partially destroyed. No loss of life or injury to person. Estimated damage to steamer, $15,000.

March 20.—While steamer *Tide* was ascending the Monongahela River, below Thirtieth street, Pittsburg, Pa., Frank Frost, a deck hand, fell overboard about 8.20 a. m. and was drowned before help could reach him.

March 29.—Steamer *Robert Taylor*, while attempting to steer around The Point, Ohio River, collided with steamer *Exporter*, breaking a cylinder timber and fantail on the former steamer. No injury to person. Estimated damage, $400.

April 25.—Rendered decision in case of investigation as to cause of collision between steamers *Rose Hite* and *John F. Klein*, which occurred near Thompsons landing, Monongahela River, December 14, 1905, resulting in the drowning of 4 deck hands. Suspended the licenses of John S. Fabbis, master of steamer *Rose Hite*, Walter B. Milliken, pilot of steamer *Rose Hite*, and Thomas Boland, master and pilot of steamer *John F. Klein*, for a period of 1 year each from May 1, 1906. John S. Fabbis and Thomas Boland appealed to the supervising inspector, seventh district, who reduced their suspension to a period of 4 months each.

May 22.—Steamers *Twilight* and *Braddock*, both ascending the Monongahela River with empty tows, collided below lock No. 4, slightly damaging the former steamer. No person injured. Estimated damage, $50.

June 3.—Steamer *T. J. Wood*, descending with a loaded tow, collided with steamer *Henry A. Laughlin*, which was hitching into a tow at Vesta mine No. 4, Monongahela River, about 1 a. m., sinking a barge in tow of the former steamer and damaging the wheel of the latter. Estimated damage $2,050.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SEVENTH SUPERVISING DISTRICT—PITTSBURG, PA.—Continued.

June 27.—While steamer *National* was lying opposite Sharpsburg, Pa., in the Allegheny River, dredging for sand, about midnight the steamer was discovered on fire. The crew were awakened and the fire extinguished by the use of hose. No one was injured. Estimated damage, $1,200.

June 29.—Report was made that George Tillman, a colored passenger, fell overboard from excursion steamer *Rose Hite*, about 1 a. m., near Black Diamond, Pa., Monongahela River, and was drowned.

August 11.—While steamer *Cruiser* was descending the Ohio River, with a loaded tow, opposite Georgetown, Pa., about 11 a. m., William Shafer, a deck hand, who had been under the influence of liquor, fell overboard and was drowned.

August 17.—Clarence Allemang, a deck hand, while passing coal on the ascending steamer *Rival*, fell overboard above lock No. 4, Ohio River, about 10.40 a. m., and was drowned.

October 2.—While the dredge steamer *Progress* was lying in the Allegheny River, about 250 feet from the Pittsburg shore, making repairs, Jim Jeed, deck hand, fell off the guards and was drowned, about 7 p. m. He did not come in sight after striking the water.

October 29.—Steamers *Titan* and *W. C. Jutte*, both descending with loaded tows, collided near Huston Run, Monongahela River, about 3 a. m., mashing the wheel of the latter steamer. No person injured. Estimated damage $50. After consideration of the statements of the two pilots it was concluded that H. W. Wolfe, pilot of steamer *Titan*, was to blame, and he was admonished to be more careful. No penalty was inflicted.

November 5.—While the passenger steamer *Kanawha* was ascending the Ohio River, in fog, running under a slow bell, she collided with the ferry steamer *Short Cut*, opposite West End, Pittsburg, Pa., about 12.15 p. m. No person injured. Estimated damage to steamer *Short Cut*, $50.

November 21.—While steamer *Diamond* was ascending the Monongahela River, with 2 sand flats in tow, opposite Twenty-fifth street, Pittsburg, Pa., about 6.30 a. m., from some unknown cause the steamer rolled, turned on her side and sunk. No person injured. Steamer was raised and put in commission. Damage about $1,300.

December 3.—Steamer *Tom Rees, No. 2*, ascending with an empty tow, and passenger steamer *Ben Hur*, descending, collided at lock No. 2 on the Ohio River, about 2 p. m., caused by a strong wind. No one injured. Estimated damage to property $200.

December 6.—Steamer *T. J. Wood*, descending with a loaded tow, and steamer *Henry A. Laughlin*, ascending with an empty tow, collided at Greenfield bend, Monongahela River, slightly damaging the tows of both steamers. No person injured.

December 10.—Capt. George F. Egan preferred charges against James Dobbins, a licensed master and pilot, for intemperance while acting under the authority of his license on the steamer *Two Brothers*. The case is being investigated.

LOCAL DISTRICT OF POINT PLEASANT, W. VA.

1905.

December 12.—Charles H. Watson, chief engineer, charged with obstructing safety valves on steamers *E. R. Andrews* and *W. B. Calderwood*. Case investigated, license suspended for a period of 60 days.

December 12.—William Johnson, chief engineer, charged with obstructing safety valve on steamer *E. R. Andrews* and *W. B. Calderwood*. Case investigated, license suspended for a period of 60 days.

1906.

January 2.—Steamer *Genevieve* jumped oakum out of a seam while navigating the Great Kanawha River at Charleston, W. Va., and filled with water and sunk. Was raised and recalked. Damage $300.

January 20.—W. E. Feuber, deck hand on steamer *Ben Hur*, fell overboard in the Ohio River, near Mingo, Ohio, and was drowned.

February 9.—License of Martin F. Noll, master and pilot of steam vessels, was suspended for a period of 90 days for neglect to comply with section 50, Rule V, general rules and regulations.

February 9.—License of Ezbia W. Talbott, first-class pilot of steam vessels, was suspended for a period of 90 days for neglect to comply with section 50, Rule V, general rules and regulations.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—SEVENTH SUPERVISING DISTRICT—POINT PLEASANT, W. VA.—Continued.

February 23.—Wilbur Sayre, deck hand on steamer *Iron Age*, fell between barges in tow of steamer and was drowned.

February 26.—Steamer *Bessie Smith* broke main water-wheel shaft, near Baden, W. Va. Steamer was towed to Marietta, Ohio, where shaft was welded at a cost of about $400.

February 27.—Ed. White, colored deck hand, fell overboard from steamer *Keystone State*, at Wheeling, W. Va., and was drowned.

March 6.—Steamer *Royal* broke her main water-wheel shaft while navigating the Ohio River at Clines Ripple, W. Va., which was replaced with new shaft at a cost of about $500.

April 7.—James Lecompte and Alfred B. Knight, deck hands on steamer *Henry Loury*, each had leg broken by being caught in check line while landing near Raccoon Island, W. Va.

April 8.—Steamer *H. M. Hoxie* exploded her starboard boiler at Portland, Ohio, causing the death of John Moran and Joe Wheeler, both firemen. Steamer took fire and sunk. Estimated loss of property, $40,000.

June 10.—Albert Creel, cabin boy on steamer *Excel*, fell overboard and was drowned at Armstrongs landing, W. Va., on Little Kanawha River. Body recovered.

June 16.—Steamer *Royal* broke her main water-wheel shaft at Clarks landing, W. Va., on the Ohio River. Damage to steamer, about $500.

July 4.—Oliver Barton, mate of steamer *Greenland*, fell overboard and was drowned at Halls landing, Ohio. Body was recovered.

July 20.—Steamer *M. L. Thornton* struck a rock and sunk near lock No. 11 on the Great Kanawha River. Said steamer was raised and is being repaired. Damage, $500.

July 30.—Alfonso McCutcheon, deck hand on steamer *Greenwood*, fell overboard at Charleston, W. Va., and was drowned.

July 31.—Charles Mitchell, colored cabin boy on steamer *Henry M. Stanley*, was caught in ladies' stateroom and, when caught by master of steamer, jumped overboard and was drowned.

August 10.—Casualty to steamer *H. M. Hoxie* investigated, and it was found by said investigation that the cause of the explosion of the starboard boiler of the main battery of 5 boilers was defective material in said boiler, and the licensed officer in charge of said steamer at the time of said explosion was exonerated from any violation of law whatever that might have caused the explosion.

September 22.—Thurman Huff, deck hand on steamer *Valley Belle*, and supposed to reside at Rochester, Pa., fell overboard and was drowned in the Ohio River 1 mile above Parkersburg, W. Va.

September 30.—Clarence McCune, deck hand, fell overboard from steamer *Cando*, near Clipper mills, Ohio, and was drowned while said named steamer was navigating the Ohio River. Body has been found.

October 14.—Ferry steamer *Boone No. 4*, while making landing at Point Pleasant, W. Va., on the Ohio River, struck a hidden picket, crushing a hole in bottom of hull, which caused her to sink. No lives lost. Damage about $100.

October 15.—Howard Crawford, striker pilot, was swept overboard from steamer *Raymond Horner* by a wire cable which crosses the Ohio River at the site of dam No. 18, between Marietta, Ohio, and Parkersburg, W. Va., and was drowned. Body recovered.

EIGHTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF DETROIT, MICH.

April 9.—While on a voyage from Ashtabula to Milwaukee, laden with coal, the steamer *L. C. Waldo* struck bottom at the entrance to Detroit River, near Amherstburg, Ontario, sustaining damage amounting to $10,000.

April 22.—While the steamers *Bethlehem* and *Mars* were approaching each other, both running slow, the wind suddenly caused the steamer *Bethlehem* to drift against the *Mars*, the former sustaining damage amounting to about $200, while the latter received no damage.

May 2.—While entering the Detroit River on a voyage from Buffalo to Ashland, the steamer *William G. Mather* collided with the British steamer *Midland Queen*, sustaining damage estimated at $7,000.

May 23.—The steamers *John Duncan* and *Wisconsin* approaching each other in the Detroit River, near Amherstburg, met and collided, owing to the steamer John Duncan

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—DETROIT, MICH.—Continued.

suddenly taking a sheer. The steamer *Wisconsin* was damaged to the extent of about $1,000, and the *John Duncan* to the extent of $100.

June 19.—While in the act of getting the anchor out on account of a heavy fog having set in, the steamer *America* grounded in Ballards Reef channel, Detroit River. The steamer was released the same day without having sustained any damage.

June 21.—While proceeding up the Detroit River, between Bar Point and Bois Blanc Island, a fog set in, and the steamer *Henry B. Smith* stranded on the east bank of the dredged channel. Steamer was released the next day without having sustained any damage.

June 27.—While proceeding up the Detroit River, abreast of Windmill Point, the steamer *Britannic* met and collided with an unknown tow barge, sustaining damage estimated at $200.

July 4.—The gasoline launches *Ping Pong*, *Splasher*, *Elbart*, *Louise C.*, and *Junior C.* carried passengers for hire without having life-preservers or licensed operator on board, with the exception of the *Junior C.*, which carried 15 passengers on one trip with but 9 life-preservers on board. Violation reported to proper authorities.

July 4.—The steamer *Fuller* was navigated on July 4 and 8 with an expired certificate of inspection on board, said certificate having expired July 2, 1905. Case reported to proper authorities.

July 5.—The steamer *Garland* collided with the launch from the United States steamer *Wolverine* while said launch was in the act of crossing the *Garland's* bow. The launch was damaged to the extent of $15, the *Garland* sustaining no damage. Upon investigation of the above collision, it was found that Thomas Ellis, pilot of the steamer *Garland*, had violated pilot rules V and VI, and his master and pilot's lincense was suspended for a period of 30 days.

July 8.—The steamer *Captain Dave* was navigated on an expired certificate of inspection. Case reported to the proper authorities.

July 8.—The gasoline launches *Antelope* and *Union* were operated without licensed operators in charge. The *Antelope* carried 34 passengers on one trip with but 28 life-preservers on board. Case reported to proper authorities.

July 8.—While the steamer *Frank H. Peavey* was passing the steamer *H. Houghten* in Lake St. Clair, it is alleged that the suction of the former caused the latter to collide with the *Frank H. Peavey*. The *H. Houghten* was damaged to the extent of $500, while the *Frank H. Peavey* received no damage. Investigation pending,

July 8.—The steamer *H. Houghten* carried passengers without having the required certificate of inspection on board. Case reported to proper authorities. The license of Wm. G. Deeg, master, was suspended for a period of 10 days for violation of section 4417, Revised Statutes.

July 9.—The fireman of the towing steamer *Shaun Rhue* was missing on the morning of July 9. July 11 his body was found on the east bank of the Dertoit River at Amherstburg, Ontario. The last seen of him was on Sunday, July 8, and no one has any knowledge of how he came to be drowned.

July 13.—The steamer *Shaughraun* tripped on a boulder near Limekiln crossing, Detroit River, rolled over and sunk. She was raised the following day. Damage estimated at $500.

July 24.—The steamer *Robert Holland* and *W. B. Castle* collided near the head of Belle Isle, Detroit River, resulting in the sinking of the steamer *W. B. Castle*. The *Robert Holland* was not damaged, while the *W. B. Castle* is a total loss, valued at $7,000. Investigation pending.

August 1.—Owing to a defect in the steering engine of the steamer *Joliet*, said steamer grounded on the west bank of Limekiln crossing, Detroit River. Steamer was released the next day after lightering 800 tons. Damage estimated at $2,000.

August 5.—While bound down the Detroit River, during a heavy wind and rain storm, the steamer *Greyhound* grounded near Sugar Island. Steamer was released the next day without having sustained any damage.

August 5.—While bound down the Detroit River, the engine of the steamer *Lewiston* stuck on center, and before the engine could be started again the steamer took a sheer and grounded on the east bank at Amherstburg. No damage to steamer.

August 22.—While the steamer *Henry B. Smith* was passing the barge *Sagamore* in tow of the steamer *Pathfinder*, in Lake St. Clair, after having exchanged proper passing signals, the barge *Sagamore* took a sheer and struck the steamer *Henry B. Smith*, damaging the latter to the extent of $500.

August 26.—The gasoline-motor vessels *Esther*, *Navaho*, *Wanderer*, and *Norman B.* were operated without having whistles on board, as provided by the act of Congress

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—DETROIT, MICH.—Continued.

approved February 8, 1895, and the general rules and regulations of the Board of Supervising Inspectors. Cases reported to proper authorities.

September 9.—Wm. J. Schultz acted as engineer of the steamer *Grace* without having the required license. Case reported to proper authorities.

September 9.—The steamer *Grace* was navigated without having a licensed engineer on board. Case reported to proper authorities.

September 9.—The steamer *Grace* carried more passengers than allowed by her certificate of inspection. Case reported to proper authorities. After an investigation, it was found that Capt. David Sydney, master, had not intentionally violated the law, and on account of his previous good record the case was dismissed with a warning to Captain Sydney to be more careful in the future.

September 12.—While bound down the Detroit River the steamer *City of Glasgow*, laden with iron ore, grounded on Limekiln crossing on account of the water having gone down. Estimated damage to steamer, $1,500.

September 28.—Commenced investigation of the collision between the United States steamer *Hancock* and steamer *Binghampton*, in Lake St. Clair, August 16, 1905. Investigation not completed.

October 4.—Continued investigation of the collision between the United States steamer *Hancock* and steamer *Binghampton*, in Lake St. Clair, August 16, 1905. Investigation not completed.

October 6.—While leaving the anchorage abreast of Smith's coal dock, Detroit, the strong current caused by the heavy northwest wind caught the steamer *Sultana* on the port bow, causing her to drop down on the steamer *H. B. Hawgood*, which was lying at anchor, the *Sultana's* starboard side coming in contact with the *H. B. Hawgood's* port anchor, causing damage to the *Sultana* estimated at $150. Estimated damage to the steamer *H. B. Hawgood*, $1,000.

October 8.—While proceeding down the Detroit River on a voyage from Presque Isle to Cleveland, the steamer *Hendrick S. Holden* touched bottom about abreast of the head of Bois Blanc Island, sustaining damage estimated at $2,000.

October 9.—While attempting to turn around near Ballards Reef, Detroit River, the steamer *Hurlbut W. Smith* struck bottom, bending the shoe and denting 3 plates. Estimated damage, $2,000.

November 5.—The steamer *George W. Peavey* stranded near Bois Blanc Island, Detroit River, during a heavy fog, sustaining damage estimated at $35,000.

November 16.—While the steamer *Desmond* was entering River Rouge at about 10.10 p. m., John A. Dale, wheelsman, disappeared, and it is supposed that he was drowned as he has not been seen since.

November 16.—Upon investigation of the collision between the barge *Adriatic*, in tow of the steamer *R. P. Ranney*, with Bar Point Shoal light-vessel *No. 59*, on October 17, 1906, it was found that James McCannell, master of the steamer *R. P. Ranney*, was guilty of unskillful navigation of his steamer, and his license was suspended for a period of 30 days.

November 21.—Charges having been preferred by Capt. F. D. Forrest of the British steamer *Landsdowne* against H. Chesley Inches, pilot of the steamer *Florence B.*, for alleged failure to answer passing signals, the case was investigated, and upon investigation the charges were not sustained and the case was dismissed.

December 20.—Upon investigation of the collision of the barge *Homer*, in tow of the steamer *Rand*, with light-vessel *No. 65*, Limekiln crossing, on August 25, 1906, it was found that the barge was entirely at fault; that the steamer *Rand* was being carefully navigated, and that, under the circumstances, Capt. William Booth, master of the steamer *Rand*, was in no way to blame.

LOCAL DISTRICT OF CHICAGO, ILL.

January 22.—In the case of appeal of Gustaf E. Anderson, his license suspended for 30 days, decision of this board was sustained by the supervising inspector. Case appealed last quarter, 1905.

February 7.—Steamer *Empire State*, while entering harbor of Chicago, broke high-pressure piston and cylinder, causing damage of $200. No persons injured.

March 6.—Steamer *Lorein* was navigated on Illinois River without having been inspected and without licensed officers in charge. Case reported to collector of customs and United States district attorney.

April 23.—Steering gear of steamer *Pine Lake* became disabled through the breaking of the shaft. Steamer took a sheer and collided with barge *Montezuma* lying at the dock in Chicago River. Damage to steamer *Pine Lake*, $800.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—CHICAGO, ILL.—Continued.

April 30.—Steamer *Tioga*, being caught by a current in the Chicago River, struck stone approach to Clark Street Bridge, doing slight damage.

April 30.—Steamer *Carter H. Harrison*, while running between the breakwater and North pier, Chicago Harbor, broke her crank. Damage to machinery, $150.

April 30.—Steamer *Tioga* struck St. Paul Railroad dock, doing slight damage to steamer.

May 2.—Steamers *City of Chicago* and *Harry Coulby* collided in Lake Michigan. Damage to former, $30; to the latter, slight. Case was investigated, and the license of Delwin Fisher, second-class pilot, was revoked for not maintaining a watchman and for blowing cross signals. Delwin Fisher appealed to the supervising inspector, and the board's decision was sustained.

May 3.—Steamer *Soo City*, in entering Chicago River, was caught in the current and struck Clark Street Bridge. Damage to steamer, $300.

May 15.—Steamer *Lewiston*, during smoky weather, stranded about one and one-half miles off Edgewater, Lake Michigan. After lightering about 30 tons of cargo, steamer was released without damage.

May 17.—Gasoline vessel *Maryette* navigated on an expired certificate of inspection from May 17 to May 24. Case reported to the collector of customs.

May 18.—About 11.30 p. m., boiler head on starboard boiler of steamer *Kearsarge* cracked over the middle furnace while the steamer was lying at Depot Harbor, Ontario. Steamer proceeded to Chicago with port boiler, where repairs were made to the amount of $1,000. No persons injured.

May 26.—Complaint was made alleging that John Miner, engineer of the steamer *Carter H. Harrison*, was intoxicated and did not properly answer signals, resulting in the steamer striking the dock. Case was investigated. Charges were not proven and case was dismissed.

May 26.—Steamer *Ramapo* had port anchor down in a northeast gale of wind, about 2 miles east of Waukegan light and lost same. Value, $250.

May 28.—Steamer *J. C. Evans*, while proceeding up the Chicago River, collided with Throop Street Bridge, due to failure of steering gear, damaging the steamer to the amount of $400.

May 30.—Steamer *Frontenac* collided with steamer *C. W. Elphicke* in Waukegan Harbor, damaging the steamer *C. H. Elphicke* to the amount of $100. No damage to steamer *Frontenac*. Upon investigation, it appears that the collision was caused by a high wind and the effects of a seiche caused by a high barometric pressure at the northern end of Lake Michigan and a correspondingly low pressure at the southern end. No one at fault for the collision.

May 30.—W. E. Stafford appealed from the decision of the local inspectors in refusing to grant him an examination as engineer of river steamers for not having had the required preliminary experience. Decision of this board sustained by the supervising inspector.

June 1.—Steamer *James R. Langdon* struck the bottom of Lake Erie, or a supposed sunken wreck, breaking several planks on port bilge of steamer. Damage, $2,000.

June 2.—While proceeding up the Chicago River the steamer *Niagara* colided with the steamer *Petosky* lying at the dock near Clark Street Bridge. Damage to steamer *Niagara*, about $20; to the steamer *Petosky*, none.

June 4.—Gasoline vessel *Eleanor III.*, while being navigated on Chicago River, failed to have a whistle in working order as required by section 2, Rule X, general rules and regulations, exchanged passing signals with a tin horn blown by lung power and then took the opposite side as indicated by the signals. Case was reported to the collector of customs.

June 10.—Steamer *Chemung*, in tow of a tug, collided with the steamer *Bethlehem*, lying at Lehigh Valley dock, Chicago River, doing damage to the steamer *Bethlehem* estimated at $25. No damage to the steamer *Chemung*.

June 17.—Steamer *Starrucca*, while entering the draw of Washington Street Bridge, Chicago River, struck the east approach to the bridge, sustaining damage of $100.

June 26.—Steamer *Chemung*, while backing into elevator slip at South Chicago, struck dock with propeller, damaging propeller to the extent of $100.

June 28.—Steamer *Ogdensburg*, while entering Washington Street Bridge, Chicago River, struck the abutment, sustaining damage to the amount of $300.

June 30.—Steamer *Petosky*, in proceeding up the Chicago River, collided with State Street Bridge, due to the bridge being stopped when partly open, breaking the spar of the steamer. Damage, $200.

July 8.—Steamer *Relief* collided with steamer *Carter H. Harrison*, on Lake Michigan, at Lincoln Park, the steamer *Relief* sustaining damage of $25. Both masters were

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—CHICAGO, ILL.—Continued.

more or less to blame for the slight collision which occurred and were admonished by this board to use more care in handling their steamers.

July 9.—Steamer *Henry S. Sill*, while lying at the dock at Michigan City, Ind., caught fire by reason of a spark from the smokestack dropping into the pilot-house window casing. Estimated damage, $4.

July 11.—While the steamer *City of Benton Harbor* was being towed out of the river, a gasoline launch named *Lizzie* ran out of the Illinois Central slip and collided with the port wheel of the steamer. The launch had no lights; and at the time of the report it was believed that 2 persons from the launch had been drowned; but upon investigation it was found that no one was drowned, that the launch had been navigated by persons unknown. No damage to steamer.

July 13.—Steamer *Walter Vail*, proceeding up the Chicago River, collided with the dock between Lake and Franklin streets, doing very slight damage to the steamer.

July 15.—While steamer *Tuscarora* was loading at the Chicago and Alton dock, Chicago River, a longshoreman named John Maizie attempted to jump ashore from the steamer, but fell in the river and was drowned.

July 16.—Complaint was made that James Reid, engineer of the steamer *Wisconsin*, had assaulted one of his firemen, in violation of section 5347, Revised Statutes. Upon investigation it was determined that the assault was not committed upon the high seas, but was partly on the steamer and partly on the dock, and was the result of great provocation on the part of the fireman, who was intoxicated. Mr. Reid was reprimanded by this board and directed to use more caution in the future.

July 20.—While the steamer *H. W. Williams* was being shifted at the dock near Rush Street Bridge, a deck hand by the name of Frank Smith attempted to jump from the dock to the steamer, missed her and fell into the river and was drowned, although every effort was put forth to rescue him.

July 21.—Steamers *Waubun* and *Junior* collided in the draw of State Street Bridge, Chicago River. According to the statements received, collision was unavoidable. No pilot rules were violated. No damage done.

July 25.—Steamer *Rutland*, in attempting to pass through Fuller Street Bridge, Chicago River, stuck between the piling, making it necessary to remove one tier of piling to release her, damaging the steamer to the extent of $1,500.

August 3.—Steamer *City of Kalamazoo* was found with a raft not in proper repair. Case was investigated. Captain of the steamer was reprimanded by this board and has since been dismissed from the command of the steamer.

August 8.—Towing steamer *Andy* was reported by Mr. H. A. Perry as having carried 6 persons while steamer was navigating Lake Michigan. Certificate of inspection permitted her to carry only 3 persons. Case reported to the collector of customs.

August 8.—Steamer *Andy* was reported by the master of the steamer *City of Traverse* as having blown her whistle continuously for 2 hours while in close proximity to the steamer *City of Traverse*, hindering the navigation of the steamer *City of Traverse*, causing the life-saving crew at Jackson Park to think the steamer was in distress and to row about 4 miles out into the lake. Upon investigation, the license of John Doyle, master of the steamer *Andy*, was suspended for 10 days for misconduct.

August 11.—Steamer *S. O. Neff*, while navigating on Lake Michigan, near Chicago, broke her shaft in the driving bearing, resulting in damage of $150.

August 12.—Steamer *Joseph L. Hurd*, when about 20 miles northeast of Grosse Point, sprang a leak, which pumps and siphons were unable to control. Steamer being in an apparently sinking condition and fires extinguished, crew left the steamer in her lifeboat and were later picked up by the crew of the *Mohawk* and taken to the port of Chicago. Steamer *Joseph L. Hurd* was towed into the port of Chicago by tugs sent out to rescue her, and afterwards sunk in a slip in the harbor of Chicago. Steamer is a total loss, amounting to $10,000.

August 18.—Steamer *Waubun*, while navigating on Lake Michigan, about 4 miles east of the harbor, broke bolt in the coupling of the shaft. Broken bolt was forced through the side of the vessel, causing damage to the amount of $38.

August 19.—Gasoline motor vessels *Eva* and *Florence* collided while making landing at pier in South Chicago. It was alleged that whistles were blown in violation of pilot rules. Upon investigation, charges were not sustained and case was dismissed.

August 20.—The machinery of the gasoline motor vessel *Grace J.* refused to work on account of short circuit in electrical apparatus. Reached shore in safety after a delay of about 2 hours.

August 22.—Steamer *Starrucca*, while on Lake Michigan, near Chicago, had 1 of her deck hands injured while taking bar from coal bunkers. He was sent to the hos-

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—CHICAGO, ILL.—Continued.

pital upon arrival of steamer at Chicago, and it was necessary to amputate the first joint of his finger.

August 23.—Steamer *C. H. Conover*, while leaving dock in Chicago Harbor, caught fire from some unknown cause, doing damage to the extent of $2,000. No lives lost or persons injured.

August 25.—Gasoline motor boat *Truscott* and another boat, name not known, were reported as having been navigated without signal lights and failing to reply to passing signals, and carrying passengers without licensed officers required, while engaged in business on the Illinois River, at Utica, Ill. Case reported to the collector of customs. Upon request of the collector of customs, this board made a personal investigation of the case while on a trip down the Illinois River and found that the charges were not correct, boats having lights required by law, suitable whistles for giving passing signals, and were not engaged in carrying passengers.

August 26.—While the steamer *City of Racine* was being winded at her dock near Rush Street Bridge, the windlass head broke, slightly injuring 2 of the deck hands.

August 28.—Steamer *John Sharples*, while winding in the slip at Waukegan, Ill., struck an obstruction in the channel, puncturing the bottom, causing damage to the amount of $6,600.

August 30.—This office was informed by the master of the gasoline motor boat *Grace J.* that engineer Joseph Johnson had refused to start his engine upon receiving bells and had attempted to take the wheel away from him. Case was investigated by this board and charges were not proven. Case dismissed.

August 30.—The master of the steamer *Theodore Roosevelt* reported the master of the steamer *Wotan* as not having answered passing signal which was repeated and then answered by the *Wotan*. Steamer failed to comply with the pilot rules, causing the steamer *Theodore Roosevelt* to stop engines to avoid collision. Case investigated. Master of the steamer *Wotan* admitted the violation and his license was suspended for 30 days.

September 13.—Arthur M. Eckersall was reported to the collector of customs and United States district attorney for having acted as engineer of the steamer *Ella* without having a license. Efforts made to apprehend Mr. Eckersall by the United States marshal, but he has not yet been taken into custody.

September 14.—While backing out of the Illinois Central slip, Chicago Harbor, steamer *Tioga* struck the dock and damaged the rudder, broke 2 blades of her propeller, and collided with the steamer *City of Racine*. Damage to steamer *Tioga* $250; to steamer *City of Racine*, very slight.

September 15.—While lying at the dock in Waukegan Harbor, steamer *Elsie Nell* caught fire, supposed to have been caused by some hot ashes contained in a box on deck, damaging the steamer to the extent of $500.

September 18.—Report made to this office that master and pilot of the steamer *City of Peoria* had violated section 4477, Revised Statutes, sections 19 and 50, Rule V, general rules and regulations, while navigating the Illinois River during the month of September. Case investigated October 19, at Peoria, Ill., and the licenses of Charles L. Liston, master, and Dellie T. Sivley, pilot, were suspended for 90 days.

September 24.—Ferry tug *Petrel* was navigated from St. Joseph, Mich., to Michigan City, Ind., on an expired certificate of inspection. Case reported to the collector of customs and United States district attorney.

September 24.—While steamer *City of South Haven* was crossing Lake Michigan a passenger by the name of L. A. Leighton either jumped or fell overboard. His absence was not discovered until the arrival of the steamer at Chicago about 6 o'clock in the morning of September 25.

September 24.—While steamer *Wisconsin* was on a voyage from Chicago to Milwaukee, A. M. Seligman, a passenger either jumped or fell overboard, being missed upon arrival of steamer in port. His clothing and baggage were found in his stateroom. It is supposed, from his actions and behavior, that he committed suicide.

September 29.—While backing out of the Chicago, Burlington, and Quincy slip, Chicago Harbor, steamer *Tioga* struck piling of the dock and broke 2 blades of the wheel. Damage, $250.

October 2.—While steamer *George C. Howe* was discharging cargo at Waukegan, Ill., Mr. Frank Storey, assistant engineer, started to go ashore, and while crossing the deck he was struck by a load of steel billets and knocked unconscious, sustaining very severe injuries about the head. He was removed to the Hospital at Waukegan.

October 3.—When landing at the dock, Rush Street Bridge, steamer *J. S. Crouse* struck steamer *City of South Haven*, lying at the same dock, doing damage to the

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS; YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—CHICAGO, ILL.—Continued.

extent of $25 to both steamers, caused by the engine being worked the wrong way and partly on account of the current in the river. Upon investigation by this board it was not deemed that any of the officers were blameworthy sufficiently to merit any penalty in regard to their licenses.

October 13.—While docking at the coal slip, Waukegan Harbor, steamer *Ramapo* struck a rock, breaking 4 blades on the wheel. Estimated damage, $300.

October 17.—Steamer *Shenandoah*, while backing out of the slip at South Chicago, struck the dock with the rudder, breaking quadrant, and also struck the dock on the other side of the river, damaging her stem. Damage to steamer, $500. Caused by the breaking of the wire to the signal whistle and the intoxicated condition of the master of the vessel.

October 18.—George W. Starkey, master of the steamer *Shenandoah*, found intoxicated aboard of his ship by the assistant inspectors, who were examining damage done to steamer on previous day. His license was suspended by this board for the life of the license, until March 10, 1907.

November 3.—While steamer *William S. Mack* was proceeding down Calumet River, in the draw of the Ninety-second Street Bridge, Charles H. Dhyse, an oiler, put his head out of the porthole on the port side of the engine room. The stern of the steamer rubbed the spring piles in the draw. The result was that his head was jammed between the side of the steamer and the piles, killing him instantly.

November 21.—While steamer *Clarence A. Black* was on a voyage from Escanaba to South Chicago, she encountered a severe storm in Lake Michigan. Was damaged by the waves to the extent of about $2,000.

December 1.—John Smith, deck hand on steamer *City of Traverse*, fell from the dock into the river and was drowned. Body recovered 20 minutes afterwards.

December 8.—Steamers *C. M. Charnley* and *O. B. Green*, racing for the towline of the barge *J. S. Mowatt*, Chicago Harbor, had a slight collision, damaging the steamer *C. M. Charnley* to the extent of $50. No damage to steamer *O. B. Green*. Case investigated and found both masters at fault and suspended the licenses of Edward McGary, master of the steamer *C. M. Charnley*, and Edward A. Johnson, master of the steamer *O. B. Green*, for a period of 30 days each.

December 11.—Steamer *O. B. Green*, while navigating Chicago River, collided with Fort Wayne Railroad bridge, sustaining damage estimated at $200. Case was investigated, and master and engineer found at fault in not giving and answering proper signals. Licenses of Edward A. Johnson, master, and John Garrick, engineer, suspended for 30 days each.

December 14.—Steamer *John Otis*, while navigating Chicago River, struck the house boat *Spruce*, lying near Lake street Bridge. No damage to steamer.

December 25.—Steamer *Empire State*, while in ordinary at her dock, Chicago Harbor, caught fire from some unknown cause and was damaged to the extent of $2,000.

LOCAL DISTRICT OF GRAND HAVEN, MICH.

March 12.—While the steamer *Naomi* was lying at the dock at Grand Haven, Mich., R. S. Vanduzee jumped overboard and was drowned.

March 15.—Upon investigation of the collision between the steamers *Irma L. Wheeler* and *James H. Martin*, which occurred September 5, 1904, it was found that the master of each steamer had violated Rule VI of the pilot rules. The master and pilot's license of Ephraim S. Small, of the steamer *Irma L. Wheeler*, and that of Timothy D. Smith, of the steamer *James H. Martin*, were each suspended for a period of 30 days.

April 13.—While steamer *Manistique, Marquette & Northern 1* was being towed by a tug into Manistique Harbor, steamer was caught by a heavy current and struck some unknown obstruction, breaking her rudder and bending shoe. Estimated damage to steamer, $3,500.

April 29.—Steamer *W. D. Rees*, while proceeding through Straits of Mackinac, during thick weather, grounded on Poes Reef. Released herself after throwing overboard 600 tons of coal, and then proceeded to Cleveland for repairs. Estimated damage, $2,500.

May 2.—During a heavy fog, steamer *F. W. Hart* stranded near Mission Point, Mackinac Island, Mich.; was released May 5, and proceeded to dry dock at South Chicago. Damage to steamer, $15,000.

May 15.—Steamer *William A. Reis*, en route from Cleveland to Milwaukee, collided with a steamer at McGulpins Point, Straits of Mackinac. Damage to steamer, $1,500.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—GRAND HAVEN, MICH.—Continued.

May 17.—Visited steamer *Joseph Gordon* and found that she had been navigated without the required equipment on board. Revoked her certificate of inspection and reported case to proper authorities. Also suspended license of Louis Guard, second-class pilot, for 30 days for violation of section 4453, Revised Statutes, in failing to comply with our letter of instructions as to necessary equipment on board said steamer.

May 21.—Suspended license of John L. Anderson, chief engineer, for 30 days for failure to have on board steamer *Joseph Gordon* a steam fire pump connected up and ready for use. An appeal was made to the supervising inspector, who declared the action of the local board illegal and decision null and void.

June 2.—Steamer *Pere Marquette*, while leaving port of Manitowoc, Wis., struck a sunken pile with starboard wheel, loosening same. Estimated damage to steamer, $550.

June 8.—Steamer *Lehigh* collided with steamer *John Duncan* at north end of Lake Michigan during a dense fog. Estimated damage to steamer *Lehigh*, $500; to steamer *John Duncan*, $10,000. No lives lost and no one injured.

June 18.—Steamer *Tacoma*, en route from Escanaba to Milwaukee, stranded on Grande Point Sable, Lake Michigan, during a dense fog; was released by steamers *Manistee*, *John Schroeder*, and *Maggie Marshall*. No damage to steamer.

June 18.—Steamer *Carrie A. Ryerson*, in attempting to get alongside of steamer *Georgia* at mouth of White Lake Harbor to transfer some passengers, got across the bow of the *Georgia* and was struck amidship. She proceeded into the harbor, where she sunk. No lives lost and no one injured. Estimated damage to steamer *Carrie A. Ryerson*, $600; to steamer *Georgia*, none.

July 5.—While coming out of South Haven Harbor, steamer *City of Kalamazoo* struck an obstruction, loosening her wheel. Estimated damage to steamer, $15,500.

July 7.—Investigated the collision between the steamers *Carrie A. Ryerson* and *Georgia*, and suspended the license of Dallas Johnson, master and pilot of the steamer *Carrie A. Ryerson*, for 15 days for violation of Rule III of the pilot rules for the Great Lakes.

July 16.—Investigated complaint that steamer *Pere Marquette 6* was being operated from 4 a. m. until 10 p. m. with a single crew. Found that the steamer had not been navigated more than 8½ hours on any one day up to the time of investigation, and case was dismissed.

August 3.—While backing out of dock at Petoskey, steamer *Missouri* struck breakwater, breaking rudder. Steamer towed to Chicago for repairs, by tug *Favorite*. Damage to steamer, $3,377.66.

August 5.—Herbert C. Elliott, in attempting to jump on board steamer *City of Chicago* at St. Joseph, Mich., after steamer had pulled in gang plank and was 4 or 5 feet from dock, fell into the water and was drowned. Upon investigation it was found that the company had taken due precautions to protect passengers going on board steamer, and that the officers and crew of the steamer had tried to rescue Mr. Elliott from the water, but without avail.

August 6.—Investigated complaint that gasoline vessel *Gladys*, of Saugatuck, Mich., was being navigated in violation of the law by carrying passengers for hire in excess of the number of life-preservers carried on board. Found her equipped with 75 good cork life-preservers, and the licensed officer made affidavit that he never carried passengers in excess of the number of life-preservers on board.

August 7.—Investigated complaint that motor ferry at South Haven was carrying passengers for hire, having on board Kapoc life-preservers. Found but 6 Kapoc life-preservers on board, balance being of good block cork. Kapoc life-preservers were at once destroyed.

August 7.—Investigated complaint that motor vessels belonging to Mr. Mooney, of South Haven, Mich., were being operated by his two minor sons and carrying passengers for hire. Found that Mr. Mooney had but one gasoline boat and that his son had not operated it for at least 10 days, or since he (Mr. Mooney) had learned of the law in relation to the matter.

August 10.—Steamer *J. S. Crouse*, while unloading fruit at dock at South Haven, Mich., was struck by steamer *City of South Haven* backing into her and breaking 4 of her stanchions and damaging 5 others, sustaining damage estimated at $75.

August 10.—Visited motor vessels *Hoosier* and *Buckeye* at St. Joseph, Mich., and found that they had been violating section 4426, Revised Statutes, in carrying passengers for hire without having on board life-preservers or whistles, and operated by minors. Reported cases to proper authorities.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—GRAND HAVEN, MICH.—Continued.

August 12.—Steamer *Crescent*, while off Manistee Harbor, lost rudder. Was towed into Manistee Harbor by steamer *Mathew Wilson*. Estimated damage, $75.

August 26.—Steamer *Illinois*, when about to enter Charlevoix Harbor, Mich., was run aground to avoid striking a sailing vessel. Released August 28 by tug *Favorite*. No damage to steamer. Upon investigation, September 15, it was found that Frank Richardson, master, and Harvey Conroy, second officer, had violated section 4442, Revised Statutes, and their licenses were suspended for a period of 6 months.

August 28.—When steamer *Illinois* was lying at dock in Charlevoix Harbor, Henry Krause, a freight caller employed on board steamer, fell between the dock and boat and was drowned.

September 4.—Investigated complaint that steamer *City of Chicago* was overcrowded on her trip from St. Joseph to Chicago August 20. Found that steamer had not carried more passengers on said trip than were allowed by certificate of inspection and excursion permit, and case was dismissed.

September 4.—Investigated complaint that steamer *H. W. Williams* was overcrowded and unduly late in arriving at Chicago from South Haven on her Sunday night trip August 26. Found that said steamer did not have on board as many passengers as she was allowed, and that the reason for late arrival in Chicago was the high wind and rough seas, which prevented the steamer from leaving South Haven until 4.25 a. m., Monday, the 27th.

September 7.—Steamer *Minnie E. Kelton*, while near Manistee, Mich., en route from Chicago to Port Huron, broke crank pin. Steamer was picked up by steamer *Topeka* and towed to Manistee. Estimated damage, $350.

September 8.—While steamer *R. A. Seymour, jr.*, was en route from Cheboygan, Mich., to Sturgeon Bay, Wis., cylinder head blew out of engine. Was towed into Frankfort by steamer *Ann Arbor No. 5*. Damage to steamer, $550.

October 8.—Steamer *Onward* broke loose from her moorings at Northport, Mich., and was driven on beach by high wind and went to pieces. Vessel a total wreck, valued at $500. No lives lost.

October 17 and 19.—While steamer *City of Kalamazoo* was crossing Lake Michigan, joint in feed water line blew out. Steam was blown off in each instance, and vessel drifted for several hours while repairs were being made. No other damage done.

October 20.—Steamer *Sydney C. McLouth*, while en route from Green Bay, Wis., to Buffalo, N. Y., stranded on Gull Island, Lake Michigan. Wind northeast, heavy rain, and very dark. Released by steamers *Manistique, Marquette & Northern 1* and *Margret McGann*. Damage to steamer, $1,000.

October 24.—Steamer *Manistique, Marquette & Northern 1*, while en route from Manistique to Northport, caught fire in gentlemen's toilet room in main cabin, casued by electric wire. Extinguished promptly by officers and crew. Damage, $300.

November 1.—Investigated complaint that steamer *City of Kalamazoo* was being navigated in an unseaworthy condition. Steamer was found to be a staunch, seaworthy vessel and in good condition, and case was dismissed.

December 6.—While avoiding a collision with a vessel lying at anchor, steamer *Italia* grounded in Straits of Mackinac, and while on bottom was struck a glancing blow by consort. Damage to steamer, $500.

December 11.—Steamer *Binghampton* stranded about 2 miles northeast of Skillegalee light; was released after unloading 400 tons of flour, and reloaded and proceeded to Buffalo under her own power. No damage to steamer.

December 16.—While lying at dock at Cheboygan, Mich., steamer *Myrtle* caught fire from spontaneous combustion. Damage to steamer, $800.

LOCAL DISTRICT OF MARQUETTE, MICH.

April 16.—While en route from Cleveland to Fort William, Ontario, steamer *Umbria* grounded above the dike in St. Marys River. Estimated damage to steamer, $10,000.

April 16.—While proceeding down the St. Marys River, the steamer *Saxona* met and collided with the steamer *Eugene Zimmerman*, bound up, resulting in the sinking of the latter. Estimated damage to the steamer *Saxona*, $25,000; to steamer *Eugene Zimmerman*, $80,000.

April 24.—While en route from Duluth to Buffalo, the steamer *J. T. Hutchinson* struck some unknown obstruction in Hay Lake, St. Marys River, sustaining damage estimated at $10,000.

May 2.—Completed investigation, begun June 15, 1905, of collision between steamers *Sir Henry Bessemer* and *Sylvania* on June 13, 1905, and suspended the master and pilot's license of J. W. Ehrhart, master of the steamer *Sylvania*, for 60 days for viola-

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MARQUETTE, MICH.—Continued.

tion of rules 1 and 3, pilot rules for the Great Lakes, and master and pilot's license of William S. Hoag, master of the steamer *Sir Henry Bessemer*, for a period of 15 days for violation of Rule XV, pilot rules.

May 5.—Completed investigation, begun August 29, 1905, of collision between steamers *Neshoto* and *James B. Neilson* on July 16, 1905. Oscar Olsen, master of the steamer *James B. Neilson*, and John Dunn, master of the steamer *Neshoto*, were both found guilty of violation of Rule XV, pilot rules, and their respective licenses were suspended for a period of 18 days. Decision was rendered in this case December 22, 1905, but on appeal the case was remanded for new trial by the supervising inspector.

May 11.—While navigating the Canadian channel, en route to Georgian Bay, the steamer *Vigilant* was stranded on rocks in the vicinity of Thessalon, Ontario, sustaining damages estimated at $1,500. Investigation pending.

May 17.—While navigating Whitefish Bay, Lake Superior, in a dense fog, the steamers *Troy* and *James Gayley* met and collided, the former sustaining damages estimated at $500, and the latter $2,000. Both steamers were under check at the time of the collision.

May 25.—While en route from Superior to South Chicago, during a dense fog, the steamer *Uranus* stranded on Eagle River Reef, Lake Superior. The steamer was subsequently lightered, released, and proceeded on to destination. Estimated damage to steamer, $10,000.

May 26.—While en route from Ashland, Wis., to Lake Erie, the steamer *Howard L. Shaw*, with barge consort alongside, collided with the steamer *Coralia* and her barge consort, the towline between the *Coralia* and consort raking the *Howard L. Shaw* fore and aft. No persons injured. Damage sustained by steamer *Howard L. Shaw*, $5,000; by steamer *Coralia*, none.

May 26.—While proceeding up Whitefish Bay, Lake Superior, between Pointe Aux Pins and Round Island, in a dense fog, the steamer *America* collided with a barge in tow of another steamer, whose name was not ascertained. Estimated damage to steamer *America*, $500.

May 30.—Investigated charge of incompetency preferred against Alexander Day, master and pilot, for stranding and sinking the steamer *Vigilant* on May 11, 1906. On August 4, the investigation was completed, and the first-class pilot's license of Alexander Day was suspended for a period of 30 days for negligence and unskillfulness.

June 5.—While attempting to get under headway from the Government pier below the Soo lock, steamer *John J. Albright* collided with the steamer *Harvard*, sustaining an estimated damage of $500.

June 11.—While proceeding down the St. Marys River, the steamer *Joliet* struck an obstruction in the channel, off Six Mile Point, sustaining damage estimated at $1,000.

June 15.—Steamer *Lyman B. Smith*, en route from Cleveland to Duluth, struck a rock in the middle of the canal just after leaving the Canadian lock at Sault Ste. Marie, Mich., sustaining damage estimated at $1,000.

June 19.—Under instructions from the supervising inspector, eighth district, the alleged violation of the provisions of section 4463, Revised Statutes, by steamers *Lotus* and *Maywood* was investigated, and steamers were found not guilty of violations of the law or the certificates of inspection.

June 22.—While navigating the St. Marys River at night, during a dense fog, the steamer *Louisiana* ran aground on Round Island, sustaining an estimated damage of $600.

June 24.—While landing at the Government pier at Sault Ste. Marie, Mich., the steamer *Sultana* collided with the pier, sustaining damage estimated at $200.

June 25.—While en route from Two Harbors to Ashtabula, during a dense fog, the steamer *Amasa Stone* grounded on shoal in St. Marys River. Estimated damage, $2,000.

June 27.—While steamer *J. T. Hutchinson* was lying at dock discharging cargo of coal, Charles C. Smith, second mate, was struck on the head by a piece of coal falling from pocket and instantly killed. At the time of his death the said Charles C. Smith was engaged in painting the bulwarks alongside the boiler house, after having been warned to keep away.

June 28.—Steamer *Martin Mullen* was navigated on an expired certificate of inspection. Case was investigated and violation reported to the collector of customs at Marquette.

July 7.—While navigating in or about Pequaming Harbor, the steamer *Jay C. Morse* struck some obstruction, breaking the shoe, resulting in damage to steamer amounting to $150.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MARQUETTE, MICH.—Continued.

July 9.—While lying at the Government pier at Sault Ste. Marie, waiting to be locked through, the steamer *Northern Wave* was struck by the British steamer *Midland King*, sustaining an estimated damage of $3,000.

July 10.—While entering the dike, St. Marys River, the steamer *Anna C. Minch* parted her wheel chains and struck the port bank, breaking the propeller wheel and shoe and bending the rudder. The steamer was subsequently towed to Lorain, Ohio, for repairs. Estimated damage, $2,000.

July 26.—While navigating Lake Superior, during a dense fog, the steamer *Charles Weston*, en route for Duluth, ran aground at Keweenaw Point. Steamer was released July 28, and proceeded to port of destination. Estimated damage, $10,000.

July 28.—While bound up Lake Superior, the steamer *Homer Warren* struck on the north point of shoal off Point Abbaye, sustaining damage estimated at $150.

July 29.—While bound down St. Marys River, the steamer *B. C. Smith* struck on starboard bank at Sailors Encampment, sustaining damage estimated at $8,000.

August 2.—While en route to South Chicago, the steamer *E. W. Oglebay* struck rock bottom just above the Canadian lock in St. Marys River, and again on *August 3*, while rounding to from the dock at Detour, Mich., struck rock shoal opposite Detour. Estimated damage to steamer, $1,200.

August 4.—While lying at the south pier at Sault Ste. Marie waiting to be locked down, the steamer *Cormorant* was struck by the steamer *Mary C. Elphicke*, sustaining damage estimated at $800. No damage to steamer *Mary C. Elphicke*.

August 5.—While entering the northerly approach to the American canal, the steamer *Henry B. Smith* collided with the north pier, sustaining damage estimated at $200.

August 6.—While lying at the south pier above the locks at Sault Ste. Marie, the steamer *Simon Langell* was struck by the barge *Chattanooga* in tow of the steamer *Pioneer*, upbound. Damage to steamer *Simon Langell* estimated at $500.

August 16.—In attempting to pass the steamer *C. A. Black*, which was swinging by her kedge anchor in Little Mud Lake, St. Marys River, during a heavy fog, the steamer *America*, down bound at very slow speed, swung into contact with the stern of the steamer *C. A. Black*, sustaining damages estimated at $1,000. Damage to steamer *C. A. Black*, $1,200.

August 22.—Charges having been preferred against Captain Joseph Taylor, jr., by John McDonald, fireman, for violation of Title LII, Revised Statutes, viz, habitual intemperance while acting under the authority of his license as master and pilot of the steamer *Marion*, the case was investigated; and charges not being sustained by the evidence submitted, case was dismissed.

August 24.—While steamer *Chippewa* was off Bois Blanc Island, Lake Huron, en route from Cheboygan to Detour, Mich., Clarendon Lovely, porter, lost his balance, fell overboard, and was drowned.

August 27.—When five miles east of Manitou Island, Lake Superior, en route to Duluth, the steamer *City of London* lost her propeller. Estimated damage to steamer, $500.

August 31.—While en route from Duluth to Buffalo, in Mud Lake, Lake Superior, the steamer *James Gayley* struck heavily on rocky bottom, sustaining an estimated damage of $6,000.

September 2.—While entering the Canadian lock at Sault Ste. Marie, the steering gear of the steamer *Hoover and Mason* became out of order and in consequence said steamer collided with the end of the stone pier, sustaining damage to the amount of about $5,000.

September 11.—While proceeding through the north approach of the St. Marys Canal, the steamers *Henry Steinbrenner* and *G. W. Perkins*, moving in opposite directions, after exchanging the proper passing signals, met and jammed before the respective masters realized that the canal at this place was too narrow for such steamers to pass. Estimated damage to steamer *Henry Steinbrenner*, $1,000.

September 13.—While bound up Lake Superior with a cargo of coal, the steamer *Scranton* was rendered helpless by the side plates dropping off her rudder, when about 25 miles north of Stannard Rock, where she drifted about until approached the following morning by the steamer *Hoover and Mason* and towed to Superior for repairs. Estimated loss to steamer *Scranton*, $250.

September 14.—While en route to Emerson, Mich., the steamer *Tempest* stranded on the end of Tehquamenon Island Reef in Whitefish Bay, Lake Superior, sustaining damage estimated at $2,000.

September 15.—When near Round Island, in the St. Marys River, the steamer *Amasa Stone*, upbound, met the steamer *Saxon* and barge. Just before meeting, the barge

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MARQUETTE, MICH.—Continued.

of the *Saxon* took a sheer, pulling the stern of the steamer *Saxon* over in the course of the steamer *Amasa Stone*, causing a slight collision. Estimated damage to steamer *Amasa Stone*, $300.

September 16.—While the steamer *Alfred Mitchell* was loading at Escanaba, Mich., Harry Smith, wheelsman on said steamer, fell in the hold of No. 5 hatch and was instantly killed.

September 17.—While navigating St. Marys River, with barge in tow, the engine of the steamer *Kalkaska* was suddenly stopped by the engineer, who supposed it was running hot, whereupon the barge ran into the stern of the steamer. Estimated damage to steamer, $150.

October 5.—While en route from Lorain, Ohio, to Duluth, Minn., the propeller of the steamer *Onoko* struck some submerged obstruction, breaking a bucket and stern pipe. Estimated damage to machinery, $500.

October 9.—While en route from Lorain to Washburn, Wis., the steamer *I. W. Nickolas* encountered a heavy wind and sea on Lake Superior, staving in the deck house. Estimated damage to steamer, $400.

October 13.—While en route from Superior, Wis., to Buffalo, N. Y., the steamer *Andrew Carnegie* met and collided with the steamer *William Nottingham* in St. Marys River, sustaining damage estimated at $15,000. Damage to steamer *William Nottingham* estimated at $25,000. Investigation pending.

October 29.—Shortly after passing through the locks at Sault Ste. Marie, Mich., the steamer *Fayette Brown* came into collision with the barges *Nasmyth* and *Botsford*, which had been caused to drift across her course by the force of the wind. Estimated damage to steamer *Fayette Brown*, $2,500.

October 31.—While bound down St. Marys River, the steamer *E. D. Carter* struck on rocky bottom, near Sailors Encampment, damaging the bottom plates of hull to the estimated amount of $1,600.

November 1.—While bound down St. Marys River in a fog, the steamer *Utica* stranded on Vidal shoal, sustaining damage amounting to $19,000.

November 10.—While passing out of the St. Marys Canal, the steamer *C. A. Black* collided with the south pier, slightly denting and cracking a plate on bow. Estimated damage, $50.

November 12.—While proceeding down St. Marys River, en route to Chicago, the steamer *H. C. Frick* collided with the barge *Maitland*, upbound, in tow of the steamer *Wm. F. Fitch*, by reason of said barge taking a heavy sheer to port at the critical time of passing. Damage sustained by the steamer *H. C. Frick* estimated at $7,000.

November 21.—While en route from Erie, Pa., to Superior, Wis., loaded with coal, and with the tow barge *Matanzas* in tow, during a heavy snowstorm and gale of wind on Lake Superior, the steamer *Panama* sprang a leak and went ashore near Ontonagon Mich., and it is expected that the vessel will prove a total loss. Value of steamer estimated at $55,000. The crew of the steamer reached shore without loss of life by means of the lifeboats aboard.

November 25.—While en route from Duluth, Minn., to Chicago, Ill., during a heavy sleet and snow storm, the night being very dark, the steamer *Pere Marquette* ran aground in Portage Lake, near Houghton, Mich. The steamer was subsequently released and proceeded to her destination at Chicago, where the boat was dry docked and repaired at a cost of about $4,000.

November 27.—While en route from Duluth to Toledo, about 6 miles off Point Abbaye on Lake Superior, the steamer *Robert Holland* broke the main shaft to the engine. The disabled steamer came to anchor and was subsequently towed to Baraga, Mich., by the steamer *Schoolcraft*, and from that place to Marine City, Mich., by the steamer *Shenandoah*. Estimated damage, $1,000.

December 2.—While en route from Cleveland to Duluth, during a snowstorm, the steamer *Northern Queen* stranded on Point Abbaye shoal, Lake Superior. Estimated damage, $12,000.

December 3.—Charges were preferred against David Fredericks, engineer of the steamer *The Tramp*, for alleged violation of section 4449, Revised Statutes. Investigation pending.

December 6.—While on a voyage from Conneaut, Ohio, to Two Harbors, Minn., during a snowstorm and heavy mist, the steamer *Isaac L. Ellwood* struck an obstruction off Drummonds Island, Lake Huron, sustaining damage estimated at $1,000.

December 7.—While proceeding down the St. Marys River, the steamer *William E. Reis* encountered heavy ice, corrugating and damaging the plates in steamer's hull to the amount of $2,000.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MARQUETTE, MICH.—Continued.

December 12.—While en route from Gladstone, Mich., during a snowstorm, the steamer *John M. Nicol* stranded on Big Summer Island, subsequently going to pieces and proving a total loss. Estimated value of steamer, $40,000.

December 26.—Charges were preferred against the steamer *Peter A. B. Widner* for violation of sections 45 and 50, Rule V, general rules and regulations of the board of Supervising Inspectors, and Rule VIII, pilot rules for the Great Lakes. Investigation pending.

LOCAL DISTRICT OF MILWAUKEE, WIS.

January 4.—Steamer *Ann Arbor No. 1* broke her outboard shaft and lost her port wheel at Kewaunee, Wis. Estimated damage, $700.

January 6—Grant E. Minor was found intoxicated in the performance of his duties. His first-class pilot's licenses was suspended for a period of 30 days.

January 15.—During a heavy fog steamers *Ann Arbor No. 1* and *Hennepin* collided in Milwaukee Harbor. Estimated damage to steamer *Ann Arbor No. 1*, $2,000; to steamer *Hennepin*, $300.

February 17.—Steamer *Grand Haven* struck some unknown obstruction near Milwaukee South Point, causing damage estimated at $1,000.

February 22.—A man on board the steamer *Ann Arbor No. 1* was caught between a string of cars on port side and bulwarks of boat and crushed to death.

March 18.—Steamer *Atlanta* was destroyed by fire 14 miles south of Sheboygan, Wis., on Lake Michigan. Cause of fire unknown. Estimated value of steamer $150,000. One of the crew fell overboard and was drowned.

March 26.—Upon investigation of the burning of the steamer *Atlanta*, on March 18, 1906, it was found that the fire started around the boiler room, but we were unable to find out just where it started or the cause. All the fire apparatus was in good working order and was used by the crew until the fire drove the firemen from their station, consequently the steam went down and the pressure in the hose lowered. The officers and crew were then compelled to leave. As far as could be ascertained the discipline of the officers and crew was excellent.

March 27.—While steamer *Cecelia Hill* was lying at her dock at Fish Creek, Wis., undergoing repairs she caught fire from some unknown cause and was destroyed. Loss estimated at $10,000.

April 21.—After examining the boiler on steamer *Alcona*, it was found to be in very bad condition from neglect. The license of James Countryman, chief engineer, was suspended for 6 months for neglect of duty.

April 26.—Steamer *Starrucca* stranded on Milwaukee South Point, sustaining damage estimated at $20,000. Steamer released by tugs after working about 3 hours. Weather hazy at the time. Upon investigation, June 6, it was found that the stranding was due to unskillfulness on the part of Norman Gibson, first-class pilot, and his license was suspended for a period of 90 days. The master of the steamer was exonerated from all blame. Mr. Gibson appealed from the decision of the local board in suspending his license, but their decision was sustained by the supervising inspector.

May 15.—One of the crew of the steamer *S. W. Hollister*, plying on the Wolf River, was caught in the towline and injured so badly that he died. He was warned repeatedly to be careful, and the accident was due to his own carelessness.

May 17.—While the steamer *John Roberts* was off Kenosha, Wis., on Lake Michigan, the bushing connecting the steam feed pipe to valve on steam chest of starboard engine that is used to run one of the sand pumps, broke, the escaping steam scalding the oiler on said steamer so badly that he died after being taken to the hospital.

June 2.—While leaving the port of Manitowoc, Wis., the steamer *Pere Marquette* struck a sunken pile damaging the starboard wheel. Damage estimated at $550.

June 4.—During a heavy fog the steamer *Bulgaria* stranded on Fisherman shoal, Lake Michigan, becoming a total loss. Estimated valuation, $50,000.

June 4.—During a fog the steamer *Caledonia* struck bottom about 12 miles north of Sheboygan, Wis., Lake Michigan. Estimated damage, $2,500.

July 8.—While making a landing at Sheboygan, Wis., the steamer *Nyack* struck the port quarter of the steamer *Chicago*, which was lying at the dock, damaging the steamer *Chicago* to the amount of $500.

July 10.—While steamer *Kalkaska* was abreast of Milwaukee, Wis., on Lake Michigan, the main crank shaft of the engine broke, sustaining damage estimated at $500. Steamer was towed to Chicago. No one hurt and no lives lost.

July 14.—While on Green Bay the crank pin of the engine in steamer *Saugatuck* broke. Estimated damage $500.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MILWAUKEE, WIS.—Continued.

July 18.—In trying to make a bend in the Milwaukee River, the steamer *Muncy* struck the north pier and glanced, striking the approaching steamer *James P. Walsh* head on. The steamer *James P. Walsh* was damaged to the extent of $500, while the *Muncy* was not damaged.

July 30.—A deck hand on the steamer *Christopher Columbus* fell from a scaffolding or swinging plank into the Milwaukee River and was drowned. Every effort was made to save him, but without success.

August 3.—When steamer *Chicago* was near Algoma, Wis., on Lake Michigan, the crosshead on the port side broke. Steamer was towed to Manitowoc. Damage estimated at $125.

August 4.—As the steamer *North Land* was nearing Milwaukee, the cook was overcome by heat and died.

August 18.—Steamers *Saugatuck* and J. *W. Bennett* collided about 11 miles NE. ½ N. of Long Tail Point, on Green Bay. The *J. W. Bennett* foundered, loss being estimated at $12,000. Damage to steamer *Saugatuck*, $100. Upon investigation it was found that the accident was due to negligence and unskillfulness on the part of the pilots of both steamers at the time of the collision. Neither pilot blew a passing signal and the pilot of the *Saugatuck* was asleep on watch. The license of Richard D. Baxter, first-class pilot on steamer *Saugatuck*, was revoked, and the license of Joseph Martell, jr., second-class pilot of steamer *J. W. Bennett*, was suspended for 5 months, for violation of Rule V of the pilot rules, and section 4439, Revised Statutes.

August 21.—Gasoline motor boats *Sport* and *Mildred* reported to the collector of customs and United States district attorney for violation of section 4,426, Revised Statutes. The *Sport* was carrying 24 passengers and had no life-preservers on board. The *Mildred* carried 22 passengers and had 8 life-preservers on board.

August 23.—Steamer *Case* sprung a leak and was beached at Port Washington, Wis. The steamer was released later and towed to Milwaukee, Wis. Estimated damage, $5,000.

August 28.—A waitress on steamer *Fannie C. Hart* jumped overboard near Long Tail Point, Green Bay, and was drowned. Reported as a clear case of suicide. Every effort was made to save her, but without success.

September 5.—The gasoline motor boats *Lydia V* and *Undine* collided on Fix River. Upon investigation, it was found that both operators were guilty of violation of Rule V of the pilot rules, and the operators' licenses of William C. Dunkel and Robert B. Soper were suspended for a period of 15 days.

September 12.—Charges were preferred by William L. Scherck, of Oshkosh, Wis., against William L. Johnson for making a false statement in his application for engineer's license. From the evidence submitted, upon investigation, the charges were not sustained.

September 17.—In trying to make a landing in the Milwaukee River, the steamer *Frank H. Peavey* sheered into and struck the steamer *Grand Haven* on the port bow, sustaining damage estimated at $75. Damage to the steamer *Grand Haven*, $1,500.

September 28.—One of the crew on fire tug *No. 17 M. F. D.* was found dead in the fire hold where he had fallen from the main deck. Steamer was lying at her dock in Milwaukee at the time.

October 2.—Steamer *Silver King* stranded on Fisherman shoal, Lake Michigan, sustaining damage estimated at $100. Steamer was released the next day.

October 7.—In approaching the dock at which the steamer *W. H. Meyer* and *Starke* were lying, steamer *No. 17 M. F. D.* collided with said steamers, due to the failure of the signal whistle to work, and before the signal could be given with the large whistle they came together. Upon investigation, it was found that the bolt which holds the whistle lever had come out. The steamer *W. H. Meyer* sustained damage estimated at $50. The steamers *No. 17 M. F. D.* and *Starke* were not damaged.

October 23.—Fire started in the forward part of the steamer *Frank L. Vance* when steamer was at dock in the Milwaukee River. Cause unknown. Estimated damage $3,000.

November 2.—While the steamer *Binghampton* was lying at her dock in the Milwaukee River the steamer *Caledonia* fouled her, damaging the steamer *Binghampton* to the extent of about $75. No damage to steamer *Caledonia*.

November 9.—Steamer *Iowa* stranded one-fourth mile off Hills Point, Sturgeon Bay. Intensely dark at the time, strong northwest wind. Steamer was released next day without having sustained any damage.

November 11.—Steamer *D. C. Whitney* caught fire at Racine, Wis. Cause, spontaneous combustion. The crew fought the fire with 2 lines of hose and fire extinguishers, and were assisted by the city fire department. Estimated damage, $200.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—MILWAUKEE, WIS.—Continued.

November 16.—Steamer *Orion* stranded about 1 mile north of North Point, near Milwaukee, Wis. Was released the same day. Estimated damage, $5,000.

November 21.—During a gale the steamer *Pere Marquette 17* collided with a bridge and the tug *Arctic* at Manitowoc, Wis. No damage to either boat.

December 7.—When off Racine, Wis., the steamer *Walter Vail* caught fire from some unknown cause. Fire was extinguished by the use of fire apparatus and the assistance of another steamer. Damage estimated at $3,000.

LOCAL DISTRICT OF PORT HURON, MICH.

January 4.—Investigated the collision between the steamers *C. F. Bielman* and *George T. Burroughs*, which occurred May 31, 1905, and revoked the license of James W. Montgomery, master of the steamer *C. F. Bielman*, for violation of section 4448, Revised Statutes, and section 23, Rule V, general rules and regulations. Upon appeal, the decision of the local inspectors was modified.

January 13.—Complaint having been made against Charles D. Van Norman, master and pilot, for navigating the steamer *Cornelia* over a route for which he held no license, the case was investigated and his license was suspended for a period of 90 days. Case reported to the proper authorities.

January 14.—The ferry steamer *Hattie* caught fire while lying at the dock at Courtwright, Ontario, and was totally destroyed. She was valued at $5,000.

February 5.—Upon investigation of the collision between the steamers *City of Rome* and *Linden*, which occurred on June 23, 1905, it was found that John S. Morrison, first-class pilot of the steamer *Francis Widlar*, had violated Rule 22 of the act of Congress approved February 8, 1895, and his license was suspended for 90 days, and the case was reported to the proper authorities.

February 5.—Upon investigation of the collision between the steamers *Amasa Stone* and *Eturia* on June 18, 1905, it was found that Capt. George B. Mallory, master of the steamer *Amasa Stone*, was guilty of a violation of an act of Congress approved September 4, 1890, and he was reported to the proper authorities. It was also found that Charles Gordon, first-class pilot on the steamer *Amasa Stone*, had violated the provisions of rules 15, 23, and 26 of the act of Congress approved February 8, 1895, and his license was suspended for 90 days. Upon appeal to the supervising inspector, the decision of the local inspectors was revoked.

February 5.—Mr. J. W. Smith appealed to the supervising inspector from the decision of the local inspectors in refusing him an examination for the reason that he had not sailed during the 3 years last passed. Decision of the local inspectors was modified.

February 13.—The steamer *Mary E. Pierce* parted her wheel chains and went ashore about 4 miles south of Au Sable, and became a total loss. Loss, $2,000.

February 13.—During a gale, the steamer *Deer* went ashore about 4 miles south of Au Sable and was damaged to the extent of $500. No lives lost.

February 19.—Mr. William F. Zentgrebe appealed from the decision of the local inspectors in refusing to issue him an unlimited engineer's license. Decision modified.

March 13.—Mr. H. William Hammond appealed from the decision of the local inspectors in refusing him an examination for raise of grade from second-class pilot to first-class pilot on account of not having had the required experience. Decision of the local inspectors sustained March 20, 1906.

April 22.—While the steamer *Frank H. Goodyear* was off Thunder Bay Island, a passenger named Thomas Harvey, of Sault Ste. Marie, Mich., fell overboard and was drowned.

April 27.—As the steamer *John Sherwin* was leaving Bay City, in tow of the tug *Witch*, she collided with a bridge and was damaged to the extent of $4,000.

April 27.—While proceeding up the St. Clair Flats Canal, the steamer *Joseph G. Butler* collided with a tow barge and sustained damage estimated at $2,500.

May 11.—While the steamer *Pilgrim* was bound down Lake Huron, she went aground 1½ miles from Point Aux Barques light, and was damaged to the extent of $150.

May 31.—The steamer *John B. Cowle* collided with the British steamer *Erin* abreast of Saint Clair, resulting in the sinking of the latter and the drowning of 5 of her crew. The steamer *John B. Cowle* sustained damage estimated at $10,000. After an investigation of the above collision, which was held on July 3, 1906, the officer in charge of the steamer *John B. Cowle* was exonerated.

June 2.—Capt. W. G. Harrow appealed from the decision of the local inspectors in refusing to grant the steamer *Oneida* a passenger certificate for the northwestern lakes, bays, and rivers. Decision of the local inspectors modified.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—PORT HURON, MICH.—Continued.

June 4.—While bound down St. Clair Flats Ship Canal, the steamer *Desmond* collided with an unknown steamer and sustained damage estimated at $1,000.

June 15.—The steamer *Grecian* foundered about 4 miles south of Thunder Bay Island. Loss, $110,000. No lives lost.

June 17.—The steamers *George J. Gould* and *Wawatam* collided when about 10 miles north of Port Huron, the former sustaining damage estimated at $1,200, and the latter, $300.

June 17.—The steamer *F. H. Prince* collided with the schooner *Oliver Mitchell* in a dense fog, about 21 miles from Thunder Bay Island, sustaining damage estimated at $500.

June 17.—The steamers *Manchester* and *Steel King* collided about 6 miles off Point Aux Barques in a dense fog, the *Manchester* sustaining damage estimated at $5,000 and the *Steel King*, $12,000.

June 17.—The steamer *Saturn* collided with the schooner *Ontario* in a dense fog abreast of Port Sanilac, Mich., the damage to the steamer being slight.

June 27.—As the steamer *Harvey J. Kendall* was bound up the St. Clair Flats Ship Canal, the steamer *William A. Rogers*, also bound up, ran so close to the *Harvey J. Kendall* that the suction parted the latter's towline and damaged her stern to the extent of $1,000. Complaint having been made, the case was investigated December 14, 1906, and the license of George W. Honner, master of the steamer *William A. Rogers*, was suspended for a period of 4 months.

June 28.—When abreast of St. Clair, Mich., the steamer *Alfred Mitchell* collided with the schooner *Fannie Neil*. No damage to steamer.

June 30.—The steamers *New Orleans* and *William R. Linn* collided 4 miles below Middle Island, the latter sustaining damage estimated at $2,000, while the *New Orleans* is a total loss, valued at $50,000. Investigation pending.

July 12.—Investigated the charges preferred against Alexander Trudell, operator of motor vessels, viz: being intoxicated while acting under authority of his license. He was found guilty and his license was revoked.

July 22.—The steamers *Mariska* and *Henry S. Sill* collided at the southeast bend, St. Clair River, the *Mariska* being damaged to the extent of $8,000, and the *Henry S. Sill* to the extent of $8,000.

July 26.—While about 12 miles off Au Sable, the inboard shaft of the steamer *Kongo* broke, the steamer sustaining damage to the extent of $500.

August 10.—While lying at the dock at Marine City, Mich., the steamer *John H. Pauly* caught fire and became a total loss, valued at $5,000.

August 10.—The steamers *Brazil* and *Oscar T. Flint* collided in St. Clair River, near St. Clair, Mich., the *Brazil* sustaining damage estimated at $4,000, while the *Oscar T. Flint* was damaged to the extent of $1,000. Upon investigation, it was found that Charles Guy, first-class pilot on the steamer *Oscar T. Flint*, was guilty of unskillfulness or inattention to his duties, and his license was suspended for 30 days.

August 19.—The steamers *Gov. Smith* and *Uranus* met and collided in Lake Huron, the *Uranus* being damaged to the extent of $7,000, while the *Gov. Smith* is a total loss, having been sunk. Loss, $110,000. No lives lost. Upon investigation, it was found that rule XV of the pilot rules for the Great Lakes had been violated, and the licenses of A. M. Williams, master, and James J. Coffey, first-class pilot, of the steamer *Uranus*, and William S. Shay, master of the steamer *Gov. Smith*, were each suspended for 4 months. Case reported to proper authorities.

August 22.—The gasoline motor boat *Carry All* carried passengers without having a licensed operator in charge. Case reported to proper authorities.

August 27.—While bound down Lake Huron and when abreast of Port Sanilac, the steamer *Charles A. Eddy* caught fire and sustained damage to the extent of $25,000. No lives lost. Upon investigation, it was found that the steamer had violated the provisions of section 4417, Revised Statutes, and the license of D. Bethune Elsey, master, was suspended for 30 days, and the steamer reported to the proper authorities.

September 6.—The steamers *N. Mills* and *Milwaukee* collided in St. Clair River, resulting in the sinking of the steamer *N. Mills*. Loss to steamer *N. Mills*, $15,000; to steamer *Milwaukee*, $10,000. One passenger and 1 of the crew of the steamer *N. Mills* were drowned. Upon investigation it was found that the steamer *N. Mills* had violated the provisions of section 4417, Revised Statutes, and that both steamers had violated rule 26 of the act of Congress approved February 8, 1895. Suspended the licenses of Daniel Warwick, master, and Reuben J. Gowling, first-class pilot, of the steamer *N. Mills*, for 6 months, and the license of John W. McKeown, first-class pilot of the steamer *Milwaukee*, for the life of it, viz, until March 11, 1907. Both first-class

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—EIGHTH SUPERVISING DISTRICT—PORT HURON, MICH.—Continued.

pilots appealed from the decision of the local inspectors, and the decision was modified by the supervising inspector. Case reported to proper authorities.

September 27.—The steamer *John Harper* stranded at Port Sanilac, Lake Huron, in smoky weather, and was damaged to the extent of $5,000.

September 30.—The steamer *Vulcan* stranded on the middle ground abreast of Port Huron, and was damaged to the extent of $300.

October 3.—While the steamer *F. L. Vance* was bound down Lake Huron, off Thunder Bay Island, the high-pressure crosshead pin let go and caused damage to the extent of $50.

October 8.—When the steamer *John Sharples* was about 8 miles south of Harbor beach, one of the tubes blew out of her boiler, scalding the engineer and doing slight damage to boiler.

October 10.—While the steamer *Panther* was bound up Lake Huron, off Point Aux Barques, her rudder unshipped from shoe and broke off. Damage estimated at $1,500.

October 18.—While the steamer *Mary* was bound down the St. Clair River, Edgar Gifford, while in the act of oiling engine pumps, got caught in the shaft and was killed.

October 20.—While bound down the St. Clair River, the steamer *Cherokee* collided with the barge *Chippewa*, sustaining damage estimated at $1,500.

October 28.—While bound down Lake Huron, the steamer *Pathfinder* struck an unknown obstruction, carrying away her wheel, and she then drifted ashore 12 miles south of Harbor beach, sustaining damage estimated at $20,000.

October 30.—The steamers *City of Bangor* and *Charles S. Hebard* collided in St. Clair River, the former being damaged to the extent of $1,000, while the latter was damaged to the extent of $2,000.

November 14.—While bound up St. Clair River, the steamer *James Fisk, jr.*, caught fire and was totally destroyed. Loss, $34,000. No lives lost.

November 21.—During a heavy gale, the steamers *William A. Rogers* and *W. H. Gilbert* collided in St. Clair River, the former sustaining damage estimated at $30,000, while the latter sustained damage estimated at $5,000. Collision unavoidable.

November 22.—When about 15 miles northeast of Port Austin, during a gale, the steamer *Penobscot* sustained the loss of her deck house. Damage estimated at $750. No lives lost.

NINTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF CLEVELAND, OHIO.

March 22.—On towing steamer *Alva B.*, while working between 2 steamers in Cuyahoga River, nipple on the feed pipe broke, allowing steam and water to escape, scalding a stowaway named Dennis Sullivan, who was asleep below decks, and whose presence was unknown to the crew. This man died later on. Investigated the matter and found the crew entirely blameless.

April 23.—Steamer *Bulgaria*, while lying at her dock in Cuyahoga River, was run into by steamer *Veronica*, which was bound up. Estimated damage to steamer *Bulgaria*, $800.

June 27.—While steamer *Hoover and Mason* was entering Ashtabula Harbor, she struck a rock on bottom, puncturing 1 plate and damaging 3 plates. Vessel docked. Damage, $3,000.

July 2.—While steamer *C. W. Elphicke* was lying at ore dock, Lorain, Ohio, steamer *Walter Scranton* parted lines of steamer *C. W. Elphicke*, causing her to run into the arm of a Brown hoist, which knocked off her smokestack and broke her mast and cabin skylight.

July 2.—While steamer *William P. Snyder* was near Middle Island, her engine became disabled by breaking cylinder head, and steamer was towed to Cleveland, Ohio.

July 5.—While the steamer *State of Ohio* was on her passage from Put in Bay to Cleveland, Ohio, and when about 14 miles from Cleveland, a man named Heintzelman fell overboard and was drowned.

July 5.—While Reinhold Henry, fireman on steamer *Ferdinand Schlesinger*, was assisting others to grind valve in main whistle, hot water escaped from whistle, scalding him.

July 27.—Steamer *C. W. Elphicke*, while approaching Cleveland Harbor, struck the eastern end of Government breakwater extension, causing steamer to sink. No person injured. Steamer subsequently raised.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—CLEVELAND, OHIO—Continued.

July 28.—A young man acting as cabin watchman on the steamer *City of Grand Rapids*, when midway between Port Stanley and Cleveland on Lake Erie, was missed and is supposed to have fallen overboard.

August 1.—While steamer *James E. Davidson* was on Lake Erie, one of the tubes in starboard boiler burst, scalding John Atwood, fireman, and Samuel Cleary, coal passer. Hospital report indicates recovery of both men.

August 3.—While steamer *W. D. Mathews* was in the port of Cleveland, Ohio, Russell Ward, watchman, at midnight, fell from the deck of said steamer into the river and was drowned.

August 6.—Steamer *Uganda*, while being towed down the Cuyahoga River, collided with steamer *Governor Smith*, damaging the *Governor Smith* to the amount of $100.

August 18.—Steamer *Empire City*, while on Lake Erie, off Ashtabula, had 1 of her boiler tubes let go, letting steam into the fire hold, fatally scalding 2 of the firemen.

August 25.—Steamer *Henry B. Smith*, being towed down the river at Fairport, Ohio, met the steamer *E. A. S. Clark*, and came in contact with steamer *Douglass Houghton*, damaging her boat davits, rail, bulwarks, and stanchions.

August 27.—Steamer *Rhoda Stewart*, with 2 barges in tow, shortly after leaving Cleveland, encountered a gale of wind. She ran back to Cleveland for shelter, during which time her one and one-half inch steam connection to fire extinguishers broke, allowing steam to escape, compelling her to abandon her tow to save herself. After reaching the harbor she was beached. Her consorts drifted on the beach. No person injured.

September 7.—Steamer *Sahara*, when about to enter Conneaut Harbor, struck the east breakwater, causing damage to vessel of about $500.

September 11.—Steamer *William H. Gratwick*, while being towed out of Pittsburgh, Youngstown, and Ashtabula slip, Ashtabula, Ohio, swung around and struck side of steamer *William A. Paine*, which was lying at her dock. Estimated damage to steamer *Gratwick*, $200. No damage to steamer *William A. Paine*.

September 12.—Morton Haumer and Jesse Boyer, watchman and fireman, respectively, of steamer *Zenith City*, started across the river in the shipyard scow. Meanwhile the steamer *Perry* passed. In a short time the men were missed. The scow was found adrift and one oar was gone. It was supposed that the men jumped into the river at the approach of the *Perry*, thinking it might run into them.

September 27.—William Monkman, a fireman on tug *Peerless*, while endeavoring to remove a line caught in the wheel of the tug, by diving into the water, succeeded in getting a couple of turns off of the wheel, but the last time he dived he did not rise. His body was found later.

September 29.—While steamer *Fayette Brown*, 2,080 gross tons, was entering Lorain Harbor in a heavy sea, the wheel chains carried away. The steamer tailed around and struck on the riprap work of the new breakwater, breaking the buckets of wheel. After the sea subsided steamer got to the Lorain dry dock, where repairs were made.

October 4.—A dock laborer by the name of McGraw, while assisting in coaling the steamer *City of the Straits* and while descending the plank, fell between steamer and dock and was drowned.

October 6.—Tug *Wm. Rollar*, while passing through Ashtabula River, and when close to steam lighter *Black Diamond*, the *Black Diamond* began backing and struck tug *Wm. Rollar*, damaging her to the extent of about $100. No person injured.

October 6.—Steamer *John J. Albright*, while being towed into Ashtabula Harbor, struck pier, damaging a number of plates and frames on port bow.

October 10.—While steamer *Hendrick L. Holden*, 4,444 gross tons, was shifting from one point to another at her dock in Cuyahoga River, the steamer *Luzon* went past, causing a suction which brought both steamers together, slightly damaging 2 plates on starboard bow. Estimated damage, $200.

October 27.—Steamer *Lackawanna*, while entering Cleveland Harbor in a heavy sea, struck the breakwater extension, breaking a hole in her side, which caused her to sink. No person injured. Wind and sea worked the steamer over submerged extension and she sunk outside to eastward of entrance.

October 31.—George Dougherty, a deck hand on steamer *Douglass Houghton*, while putting on the hatches, slipped and fell into the hold, and was killed.

October 31.—Steamer *Northern Queen*, when leaving her dock on Cuyahoga River, and while making a turn in the river, backed into the dock and broke the buckets off her wheel. No person injured.

November 6.—Steamer *W. H. Gilbert*, while on Lake Erie, off Avon Point, in a heavy fog, ran aground. Steamer was under check. Jettisoned 500 tons cargo and proceeded on her way.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—CLEVELAND, OHIO—Continued.

November 7.—Steamer *Henry Cort*, while lying at upper furnace No. 6, caught fire in coal bunker, destroying inside of wheelhouse and part of cabin. Fire tug extinguished flames. Damage estimated at $750.

November 17.—John Phillips, a seaman on steamer *E. J. Earling*, was struck by an ore bucket and knocked into the hold of the vessel. He was removed to the hospital, where he died from his injuries.

November 21.—Steamer *P. P. Pratt*, while on Lake Erie, south of the middle ground, struck an obstruction which caused her to leak, but continued to her destination at Buffalo, N. Y. The steamer will be dry docked.

December 16.—About 8.40 p. m., while steamer *Northern Wave* was making a landing she struck something hard, damaging bottom of steamer. Damage not estimated.

LOCAL DISTRICT OF BUFFALO, N. Y.

January 6.—About 7 p. m. fire was discovered on steamer *Sandy Hook*, which was lying in the Erie Canal at Potomac avenue. The upper works were destroyed. Damage, $2,000. Origin of fire unknown.

April 7.—Steamer *Mohegan* was leaving Buffalo Harbor; and while making turn at the Watson elevator in face of a heavy current and wind she came in contact with a dock and glanced off and struck the steamer *McWilliams*, doing damage to both steamers estimated at $200.

April 25.—About 11 a. m. steamer *Saturn* was entering Buffalo piers. Steamer *Wisconsin* was moored at extreme end of north pier; and when *Saturn* was about abreast of *Wisconsin's* stern she took a sudden sheer, striking the *Wisconsin* a glancing blow aft. Damage to *Saturn*, $2,000; to *Wisconsin*, $1,200.

April 27.—While steamer *Chemung* was being fitted out, a sailor named Harvey Clement, while attempting to reeve off a gantline, fell from the eyes of the rigging to the deck and was instantly killed.

June 1.—In the evening steamer *Cumberland* came in collision with abutment of Ohio Street Bridge on account of low water in the Buffalo River, damaging steamer to the amount of $500.

June 3.—About 4.30 p. m., while steamer *White Star* was nearing Buffalo breakwater, en route from Crystal Beach to Buffalo, piston broke and steamer had to be towed to dock. Damage to machinery, $200.

June 12.—About 3 p. m., steamer *Milwaukee* took a sheer at Watson elevator on account of low water, and struck steamer *Minneapolis*, damaging latter vessel to the amount of $3,500.

June 19.—In the evening, when steamer *John F. Eddy* was off Port Colborne, Lake Ontario, the propeller wheel was lost. Damage, $1,500.

June 24.—About 5 p. m., when steamer *Veronica* was navigating the Niagara River near the waterworks crib at Buffalo, wheel chains parted, causing the vessel to run aground. Released June 26. Damage, $1,000.

July 25.—Steamer *Wallula* left Erie, Pa., about 3 p. m., and when a few miles from the harbor fire was discovered in the hold. Steamer put back to Erie and fire was extinguished. Damage, $500.

August 15.—Complaint made by special inspector of the Treasury Department against Timothy Wilson for violating section 4426, Revised Statutes, with motor boat *Sunrise Bell*, August 15, at Olcott, N. Y. Charge admitted by Mr. Wilson, and his license of operator of motor boat of 15 gross tons and under suspended for 15 days, and case reported to the collector of customs at Niagara Falls, N. Y.

August 20.—About 7 a. m., when canal steamer *S. L. Clark* was navigating in Blackwell Canal, Buffalo Harbor, she struck a ferry scow containing 3 people, upsetting it, and 1 man was drowned. The ferry scow attempted to cross the bow of the steamer despite the warning of the lookout not to do so.

August 26.—In the afternoon, at Edgewater, Niagara River, William Gurner, a deck hand of steamer *George Dittly*, attempted to jump from that vessel to the steamer *Argosy* and fell between the two and was drowned.

September 3.—While steamer *Henry Koerber, jr.*, was making a trip from Tonawanda to Edgewater, Niagara River, steamer got in trough of sea and cracked whistle steam pipe at dome. Passengers landed at a nearby dock, pipe repaired, and vessel proceeded on the trip.

September 19.—About 5 p. m., while tugs *E. E. Frost* and *Delaware* were navigating in the same direction in Buffalo Creek, the tug *Frost* suddenly became disabled, and the *Delaware* was so close behind and running at such a rate of speed that she was

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—BUFFALO, N. Y.—Continued.

unable to avoid hitting the *Frost*. The fireman of the *Frost* evidently became frightened and jumped overboard and was drowned. Damage to tug *E. E. Frost*, $75. Case investigated, and licenses of Merrit N. Byrnes and John J. Killelea suspended for 6 months and 30 days, respectively, for violation of the pilot rules. Case appealed to the supervising inspector of the ninth district and decision of local board affirmed as regards Merrit N. Byrnes and revoked as regards John J. Killelea.

October 4.—Steamer *John Crerar*, while attempting to tie up at the Buffalo breakwater, struck her rudder, breaking the stock and shipping collar. Damage, $3,000.

October 16.—About 7.30 a. m., while steamer *Mars* was in the vicinity of Windmill Point, Lake Erie, en route from Duluth to Buffalo, she ran aground, but sustained no damage.

October 23.—About 8 p. m., while steamer *Cumberland* was navigating from Buffalo Creek, assisted by a tug, she struck center pier of Ohio Street Bridge and sunk. Damage, $2,500. Case investigated, but responsibility could not be placed upon any one connected with the navigation of the vessel.

October 25.—While steamer *Luzon* was lying at West Shore dock, Buffalo Harbor, Edward Cole, a deck hand, fell from ladder, striking side of ship, rolled into the river, and was drowned.

November 16.—Steamer *J. D. Scott* left Charlotte, N. Y., in tow of steamer *Algona*, bound for Sodus, N. Y., to lay up for the winter. A severe storm was encountered, and steamer *J. D. Scott* sprang a leak and sunk near Pultneyville, N. Y., being a total loss; amount, $2,000.

November 20.—About 1.30 a. m., while steamer *Mohegan* was maneuvering near the breakwall, endeavoring to get a line to a barge, the steamer collided with the breakwall, sustaining damage to the amount of $6,000.

November 25.—About 7 p. m., while steamer *E. W. Sutton, jr.*, was proceeding to her dock in Dunkirk Harbor, N. Y., she struck a rock and sunk. Damage, $230.

December 4.—While steamer *Henry B. Hall* was lying at her dock in Charlotte Harbor, N. Y., Samuel J. McRoberts, second mate, fell into the hold of the vessel, and death resulted from the injuries sustained.

December 5.—About midnight, while steamer *B. Lyman Smith* was navigating Buffalo Harbor in charge of 2 tugs, she collided with steamer *B. F. Jones*, which was moored at the Erie elevator, damaging steamer *B. Lyman Smith* to the amount of $500.

December 8.—Between 11 and 12 p. m., while steamer *William F. Halstead* was lying at the Eagle Street Dock, Dunkirk, N. Y., fire broke out from some unknown cause, destroying all upper works. Loss, $3,500.

LOCAL DISTRICT OF BURLINGTON, VT.

July 8.—Tug *Triton* was found to be running on an expired certificate of inspection. Suspended licenses of both master and engineer for 15 days.

LOCAL DISTRICT OF OSWEGO, N. Y.

June 3.—The passenger steamer *Mary*, of Ogdensburg, N. Y., of 174 gross tons, while lying at her dock at Waddington, N. Y., was totally destroyed by fire. Loss estimated at $5,000.

July 16.—At 3 a.m. the steamer *Albert M. Marshall* grounded heavily in Lake St. Louis, River St. Lawrence, causing leaks in tanks Nos. 1 and 2. Got off by assistance of tugs at 12.50 p. m.

July 17.—Steamer *Albert M. Marshall*, while entering second lock of Cornwall Canal, damaged 2 plates. Estimated total damage on July 16 and 17, $10,000.

July 21.—About midday, while the steam yacht *Althea*, of East Orange, N. J., was at anchor on south side of Grindstone Island, River St. Lawrence, she caught fire under her water-tube boiler. Fire put out by water from deck pump. Cost of repairs reported, $97.59.

July 22.—About 2 p. m., while steamer *Iroquois* was en route from Oswego to Alexandria Bay, a tube suddenly split in one of her water-tube boilers, blowing the fire and ashes out of ash pit, and slightly burning one of the coal passers. Boiler cut out and vessel proceeded to destination, and also returned to Oswego with 3 boilers in operation, where repairs were immediately made.

September 3.—About 2.15 p. m. steamer *New Island Wanderer*, en route from Alexandria Bay to Clayton, with passengers, broke high-pressure cylinder head and piston follower. Cause of accident, the breaking of a boiler bolt. No one injured. Vessel towed to port of Kingston, Ontario, where repairs were made. Cost of repairs not reported.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—OSWEGO, N. Y.—Continued.

October 8.—At 9.50 p. m. steamer *Albert M. Marshall*, while passing a dredge lying off Montreal, drifted against the dredge and, striking heavily, damaged 3 plates. Estimated damage, $1,000.

October 24.—Steamer *Grand View*, of Clayton, N. Y., 17 gross tons, dragged her anchor and went ashore on head of Little Calumet Island. Vessel, a total loss. Boiler and machinery recovered. Loss estimated at $300.

November 18.—Steamer *J. S. Keefe*, en route from Duluth to Montreal, struck bottom in Rapid DePlat, River St. Lawrence, causing her to leak. Got off and proceeded to Montreal. Damage not ascertained.

December 4.—While steamer *Henry B. Hall* was loading coal in Genesee River, the second mate, Samuel J. McRoberts, accidentally fell into the hold, and, striking on his head, was instantly killed.

December 9.—The steamer *F. H. Prince*, of Ogdensburg, N. Y., when coming to the dock about 1 p. m., had a hole stove in her hull by ice. Much of the cargo was damaged by water. Damage to vessel estimated at $50.

LOCAL DISTRICT OF TOLEDO, OHIO.

May 13.—About 11.15 p. m. steamer *George B. Leonard*, 4,037 gross tons, collided with the wreck of the barge *Armenia* which sunk to the northward of Pelee Island, Lake Erie. The steamer sustained no damage. No loss of life.

July 2.—At 7 p. m. steamer *William P. Snyder*, when about 6 miles WNW. of Middle Ground light-house, Lake Erie, the engine became disabled by piston going through intermediate cylinder head of engine. Amount of damage not reported. No lives lost or persons injured.

July 12.—While steamer *Oscar T. Flint*, of Duluth, Minn., 823 gross tons, was leaving Kelleys Island with a cargo of stone, the machinery became disabled through the breaking of a cross in universal coupling. The steamer was towed to Detroit, Mich., for repairs. No personal injury reported.

July 21.—Steamer *Cadillac*, 1,263 gross tons, while unloading ore at the Hocking Valley dock, Toledo, Ohio, 2 hoisting machines fell on her deck. No loss of life or personal injury reported. Damage to steamer, $200.

August 1.—Steamer *City of Toledo*, 1,003 gross tons, while entering Toledo Harbor, became disabled through the breaking of high-pressure cylinder. The steamer was towed to Detroit, Mich., for repairs, the cost of which is estimated at $3,000. No loss of life or personal injury reported.

August 3.—Steamer *Arrow*, 365 gross tons, at Sandusky, Ohio, collided with steamer *Douglas*, 230 gross tons. No damage done to steamer *Arrow*. Estimated amount of damage to steamer *Douglas*, $25. From reports regarding the collision it appears that the *Douglas* was backing out of a slip at the time, and answered the *Arrow's* passing signal of 2 blasts. After giving the said passing signal, had the master of the *Douglas* stopped his vessel or checked her momentum sufficiently to allow the *Arrow*, which was in the channel, bound out, to pass her, instead of going ahead as he did, in our opinion the accident would not have occurred.

August 8.—About 10 p. m. steamer *Lucille*, 71 gross tons, bound from Sandusky, Ohio, to Toledo, Ohio, for repairs, when about 4 miles past West Sister Island, on range of straight channel, Lake Erie, sprang a leak and sunk. Upon examination previous to sinking it was found that the gland to the stuffing box was out of the sleeve. An attempt was made to run the steamer to shallow water, but the pumps failed to free her. All on board escaped in lifeboats. The steamer was subsequently raised.

August 19.—At 3.55 p. m. steamer *City of Grand Rapids*, while lying at Put in Bay, Ohio, caught fire by the explosion of a small hand lamp or torch in the lower engine room. No one injured. Damage estimated at $200.

August 25.—At 8 p. m., while Charles Ziesler, a scrubber, was trucking freight aboard the steamer *City of the Straits*, which was lying at her dock at Toledo, Ohio, he slipped and fell into the water and was drowned. The body was recovered later.

September 5.—At 10.30 p. m. steamer *Homer Warren*, when near Kelleys Island, Lake Erie, while taking the towline of the barge *Wm. Crosthwaite*, was struck by the latter vessel, and a hole was stove in the steamer, also in the bow of the barge, causing the barge to sink. The hole in the steamer was temporarily repaired. No lives lost or persons injured.

September 8.—About 7.30 p. m. steamer *Columbus*, 29 gross tons, while being navigated through what is known as the east channel, ran aground on the west bank of

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—TOLEDO, OHIO—Continued.

said east channel. The 5 passengers who were on board were taken ashore on a small launch. The steamer was later released without sustaining any further damage than the twisting of her rudderstock.

September 15.—About 8 p. m. steamer *H. B. Tuttle*, 754 gross tons, while en route from Cleveland, Ohio, to Sarnia, Ontario, was discovered to be leaking and was beached at Marblehead, Ohio. On September 18 the water was pumped out and the vessel towed to Sandusky, Ohio, at which place the vessel sunk, but was raised later, repaired, and put in commission. Damage to vessel, unknown. No lives lost.

September 15.—At 11.45 p. m. steamer *Chas. B. Packard*, 676 gross tons, struck an obstacle while passing about 3½ miles WNW. ¼ W. of the Middle Ground, which caused her to leak. The steamer was headed for the beach with all her pumps working, but sunk when about 7 miles NW. by W. ¾ W. from Middle Ground light. Those on board took to the small boat and at daylight were picked up by the barge *Harold* and landed at Amherstburg, Canada.

September 16.—About 9.50 a. m. steam yacht *Adieu*, of Detroit, Mich., while en route from Monroe to Detroit, Mich., during a heavy sea, shipped water so fast that her siphon could not free her, and sunk when midway between Stony Point and Point Moullee, Lake Erie. The captain and engineer, who were the only persons on the vessel at the time, were rescued by the steamer *Maude*.

September 20.—About 1 a. m., while steamer *State of Ohio*, 1,221 gross tons, was nearing Put-in-Bay Island during thick weather, she ran aground on Rattlesnake Island. The passengers were taken aboard the steamer *City of the Straits*. With the assistance of tugs the steamer was later released.

September 29.—At 8 p. m., steamer *City of Concord*, 385 gross tons, while bound from Cleveland, Ohio, to St. Clair, Mich., with a cargo of coal, during a heavy sea, sprang a leak and sunk when about 4 miles east of the south end of Kelleys Island, Lake Erie. The lifeboat was lowered and all on aboard got in, with the exception of 2 of the crew, who refused to get into the boat when ordered to do so. These 2 persons went down with the steamer. Another of the crew who jumped out of the boat when the steamer sunk was picked up later by a vessel near the scene of the accident.

November 3.—Boarded fishing steamer *Roma*, 15 gross tons, and found the vessel and her equipment not in strictly first-class condition. The case was reported to the collector of customs and U. S. district attorney. Investigation to be made.

November 5.—At 10.30 a. m., while the towing steamer *John B. Breymann* was near Maumee Bay light, bound out with dredge and scow in tow, her engine frame broke. No one was injured. Amount of damage unknown. The steamer returned to port under her own power. The accident was caused by weakness of the iron.

November 11.—While going aboard the steamer *Oliver H. Perry*, which was lying at dock at Put-in-Bay, Ohio, Edward J. O'Harn, the master of said steamer, fell into the water and was drowned. The foregoing is in accordance with newspaper accounts of the casualty. Our supposition is that there was frost on the rail of the steamer, which caused the master to slip and fall between the steamer and the dock.

November 19.—Investigation into the conduct of Donald B. Dewey, licensed master of the fishing steamer *Roma*, 15 gross tons, developed that while a technical violation of law had been committed, in our opinion it was insufficient to warrant a suspension or revocation of license, and after admonishing the said licensed master the case was dismissed.

November 21.—About 11 p. m., steamer *Conemaugh*, 1,609 gross tons, while bound from Fairport, Ohio, to Chicago, Ill., with package freight, was struck by a heavy gale and wrecked at Pelee Point, Lake Erie. The vessel is a total loss, and was valued at about $15,000. Estimated damage to cargo, $10,000. No lives lost.

November 22.—About 1 a. m., steamer *Pascal P. Pratt*, 1,927 gross tons, bound for Buffalo, N. Y., with a cargo of iron ore, when about 1½ miles south by east of Middle Ground light-house, Lake Erie, during a severe gale, struck some obstruction, causing her to leak, but to no great extent. After proceeding to Sandusky, Ohio, for fuel the steamer went to Buffale, N. Y., to be unloaded, thence to Cleveland, Ohio, to go into dry dock. Amount of damage not reported. No lives lost.

November 22.—Steamer *Chauncey Hurlbut*, 1,009 gross tons, while en route from Manistique, Mich., to Buffalo, N. Y., with a cargo of pig iron, encountered heavy seas, which caused her to leak to such an extent that she was beached at Leamington, Canada. With the aid of pumps the vessel was freed of water, after which she was taken to Amherstburg, Canada, where temporary repairs were made and then the vessel proceeded to Toledo, Ohio, to unload cargo. Estimated amount of damage, $5,000. No lives lost.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—NINTH SUPERVISING DISTRICT—TOLEDO, OHIO—Continued.

December 28.—At 9.13 a. m., steamer *Lakeside*, 337 gross tons, while attempting to enter Sandusky Channel after leaving Kelleys Island during a fog, struck on the submerged rocks just outside of Cedar Point jetty. With the aid of an anchor to turn the wheel around, she was released at 3.45 p. m., and reached Sandusky, Ohio, without assistance. The steamer sustained no other damage than the breaking of the couplings on the rudderstock, which rendered useless the regular steering apparatus. The extra tiller and tackles were resorted to, by the use of which the vessel was finally steered to port. No loss of life or personal injury reported.

TENTH SUPERVISING DISTRICT.

LOCAL DISTRICT OF NEW ORLEANS, LA.

January 6.—While steamer *Handy* was making her usual trip up the river near Monroe, La., a difficulty occurred between Gabe Butler and Frank Smith, roustabouts on steamer *Handy*. Smith was knocked down by Butler and thrown in the river. As soon as alarm was given boat was lowered and Butler jumped overboard. Search was made but it is believed both men were drowned, as neither was seen.

January 8.—In backing from landing at Vicksburg, Miss., steamer *Scioto* struck a coal float and sunk in 8 feet of water. No freight or lives lost. Damage to boat, unknown.

January 9.—As steamer *Frank B. Hayne* was on her way to Monroe, La., she struck the wire cable of the Monroe Lumber Company. Pilot Cook blew customary signal for lowering the wire at the usual time and place, and supposing the wire was lowered, steered up the river until within 30 feet of the wire, when he discovered same was not lowered. Boat was backed at once, but headway could not be checked in time, and the wire struck and broke the beam, letting the stage fall, breaking it in two. Wire knocked the smokestacks down, set the top of the pilot house back about a foot and injured cabin and property on board. Watchman at the mill was not at his post until after the accident. Captain ordered the cable cut and proceeded to Monroe, La.

January 10.—We received a report that while steamer *Dixie* was proceeding up Ouachita River, on December 21, 1905, her flues collapsed, scalding 2 firemen, one of whom, William Beverly, died on December 22, 1905.

January 10.—We received report that steamer *Roberta* collided with wooden projection of bridge at Grand Ecore, La., causing probably complete destruction of the steamer and loss of life of Bill Hill, deck hand, and Octavie Thomas, chambermaid (both colored). The wreck lies about 500 yards below the bridge, and is apparently beyond recovery. Estimated property loss, $15,000.

January 10.—Mr. Ford took deck passage on steamer *Little Rufus* from Fish Pond to Natchez, Miss. He was under the influence of liquor. After being on board a few hours he fell down the front stairs and died from the effects of the fall in a few minutes.

January 11.—We received a report that on December 16, about 6.15 a. m., the steamer *Guy Hunter* struck an unseen obstruction and sunk in 9 feet of water. No lives lost. No freight or passengers on board at time of sinking.

January 22.—This office reported steamer *Minnie* to the collector of customs, Morgan City, La., for violation of section 4417, Revised Statutes.

January 23.—About 6 a. m., the boilers of steamer *Helena* exploded. Boat was tied up the night before, as she was running with single crew. Engineer, pilot, cook, and 2 deck hands were killed. Explosion supposed to have been caused by water in the pipes freezing during the night, and next morning when the fire was started under the boiler to get up steam, supposing the ice had thawed, commenced to operate the boat, and explosion occurred. No definite information as to its cause can be obtained, as those cognizant of the facts were killed.

January 24.—We reported steamer *Ruth*, J. A. Berlin, acting master, to the collector of customs, New Orleans, for violation of sections 4417 and 4438, Revised Statutes.

March 6.—We again reported steamer marked *U. S. M. C.* to collector of customs, New Orleans, La., for operating in violation of sections 4410, 4439, and 4438, Revised Statutes.

March 9.—About 1 a. m., fire started about the kitchen of steamer *Jack Osborn* from explosion of lamp or stove. Watchman left the cabin about 30 minutes and had gone down in the hull. When he came out he saw the fire was beyond control and awakened the cook, who escaped in his night clothes. Boat had been cooled down for the night, and no one except the cook and watchman was on board. Total loss, $8,000. No lives lost. Insurance, $5,000.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—NEW ORLEANS, LA.—Continued.

March 14.—We reported steamer *Alice C.* to collector of customs, New Orleans, for violation of sections 4417 and 4438, Revised Statutes.

March 21.—While proceeding up the Mississippi River, half a mile above Belle Point, the steamer *Mary B.* struck some hidden obstruction and sunk in about 80 feet of water, causing the death of Eugene Jackson, watchman; Walter Rankin, oiler; deck hands Sargeant Smith and Lawrence Smith, all colored. Accident occurred in the daytime, about 3 p. m., and from the time she struck until the time she sunk was about 3 minutes—so short a time that nothing could be done, though every effort was made to rescue the drowned men. Loss about $10,000.

April 1.—About 6 a. m., steamer *Minnie* sunk in 35 feet of water at the wharf of Brownell Brothers Lumber Company, Berwick, La. Steamer had all water pumped out the night before, and no leaks were discovered. Cause of leaking unknown. No attempt will be made to raise her. Amount of loss not ascertained.

April 5.—Assistant inspectors report that while on an official business trip to Jonesville, La., on March 27, they found steamer *Lessley* operating without proper licensed officers. The case was reported to the collector of customs, this port.

April 13.—On the 9.40 trip of ferry steamer *Josie*, from New Orleans to Algiers, La., when in midstream, an unknown white woman plunged overboard and was drowned. Boat's headway was checked, but on account of there being a strong southerly gale blowing, and intense darkness, it was deemed useless and dangerous to lower lifeboat. An investigation of the accident by this office shows that, on account of the bad weather and strong wind and swift current at the point at which the young woman jumped overboard, it would have been useless to have lowered the lifeboat, and the crew of the steamer were exonerated from any blame for not lowering lifeboat.

April 25.—Report received from master of steamer *White Rose* that in the fall of 1905 that steamer sunk, caused by hull filling with water, near Gramercy, La. Vessel not yet raised.

April 25.—Report received from owner of steamer *Kingfisher* that in June, 1905, that vessel turned over and sunk, in a heavy storm, while tied to the bank at Fulton, Ark. Vessel not yet raised.

April 30.—About 9 a. m., Thomas Burton (who, from papers carried by him, appeared to be from Plymouth, England), one of the crew of steamer *St. Tammany*, was carrying a chain from the tail end of a raft of logs in tow of steamer *St. Tammany*, when he slipped and fell under the logs. Boat was stopped immediately and search made, but without avail. Search continued all day. He was 42 years of age, a sailor, and supposed to be an expert swimmer, but it is possible that in falling he struck on his side on the logs and injured himself.

May 21.—Reported on this date that gasoline motor vessel *Tulane* was run from May 10 to May 21 under expired certificate of inspection. On May 25 licenses of Clay Savioe, engineer, and W. L. Rolfs, master of said boat, were suspended for 10 days.

May 22.—On inspection of steamer *Native*, at Camden, Ark., inspectors found said steamer had been operating several months without inspection or licensed officers, having on board papers of old steamer *Ike*, which steamer (*Ike*) they found to be abandoned and dismantled. Steamer *Native* had been enrolled and measured by collector's office at Memphis, Tenn. Vessel was this date reported to the collector of customs, together with the facts in the case.

May 30.—Gasoline motor boat *Reliance* left her mooring at New Orleans with Charles J. Green as a passenger on board. At 2 a. m. Captain Green was in bed sleeping, having been conducted there by John M. Cochrane, pilot, Mr. Green being very sick. About 4 a. m. Mr. Cochrane, pilot, as is his custom, went to get coffee, and on his way looked in to see how Mr. Green was resting, and not finding him in bed, instituted search, but search was futile. Drowning supposed to be accidental, but may have been premeditated, as Captain Green was a very sick man.

May 31.—While working at repairs on the wheel of steamer *Frank R. Hill*, about 200 miles above Fulton, Ark., at the mouth of Norwood Creek, Howard Pratt, white deck hand, fell into the river and was drowned. Efforts at rescue fruitless. Body not recovered. Must have had heart failure or something of the kind, as he could not have hurt himself in the fall, and made no effort to save himself.

June 1.—About 2 p. m., while tied at wharf at Baton Rouge, La., with only W. M. Gibbons, engineer, on board, steamer *Brookhill*, used as a night ferry, was sunk by windstorm. No lives lost. Amount of damage unknown.

[illegible]e 2.—About 3 p. m. steamer *Quickstep* was caught in a windstorm in Lake Des [illegible]nds, capsizing and burning to the water's edge. Boat a total loss. Amount of [illegible]00. No lives lost.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—NEW ORLEANS, LA.—Continued.

June 3.—About 5.30 a. m. steamship *El Dorado* struck a submerged wreck and broke off 1 propeller blade. Amount of damage unknown.

June 5.—About 12.30 gasoline boat *Ruth J.* passed Franklin, La., on her way down, being loaded with freight. Vessel was seen by assistant inspectors. Vessel was running without inspection. Facts reported to collector of customs, Morgan City, La.

June 7.—While en route from New Orleans to Melville, La., near Tunica Island, Mississippi River, steamer *Wm. Garig* broke shaft. Damage, about $400. Steamer towed to New Orleans.

June 10.—About 8.30 a. m., while steamer *Belle Prince* was passing Patterson plantation, near Bull Run landing, a deck hand wheeling coal, by name of William Monday, from Natchez, Miss., aged about 22, accidentally fell overboard and before lifeboats could be lowered and reach him he went down. All possible efforts were made to rescue him, but failed.

June 17.—About 10 a. m. one Fernand Dewitt, white fireman, fell overboard and accidentally drowned. Efforts at rescue were fruitless. Body recovered later and buried. Drowning from steamer *Wade*, 12 miles below Boston, La.

June 19.—On night of said date assistant inspectors discovered gasoline boat *J. E. Munson, jr.*, running without signal lights, whistle, or bell, in violation of section 4405, Revised Statutes. Reported to collector of customs.

June 19.—At the foot of Walnut street, New Orleans, about 1 or 2 a. m., steamer *Napoleon*, while at the bank, was struck by some floating obstruction in the river and sunk. No lives lost. Amount of loss, about $4,000.

July 11.—About 9.45 p. m. Adam Junius, colored roustabout, fell overboard from steamer *Bagasse* near Hulton plantation, Iberia parish, and was drowned. Efforts at rescue were without success. Body was found later and turned over to relatives.

July 20.—About 8.30 a. m., while steamer *Chas. Chamberlain* was towing schooner *Nimbus*, schooner was run into by unknown motor boat near Devils flats, Mississippi River. No lives lost. Damage unknown.

August 10.—About 11 p. m., as steamer *Red River* was proceeding up Red River just above Cottonwood Bayou, Jim Banks, negro roustabout, fell overboard from the guards near the toilet room. Yawl boat lowered, but attempts at rescue were fruitless, as the man must have sunk soon after falling into the water.

September 3.—About 6.30 a. m. steamer *Lillie* sunk and turned over at Trinity, La., proving a total loss. No lives lost. Estimated value of steamer, $7,000.

September 24.—While steamer *Proteus* was on a voyage from New York to New Orleans, when about 3 miles southeast of South Pass, a seaman named J. Hiscock deliberately jumped overboard and was drowned. All efforts at rescue proved fruitless.

September 25.—Charges against W. B. Simpson, master and pilot, being investigated. License is revoked until January 6, 1907, for being intoxicated in violation of section 4442, Revised Statutes.

September 25.—Steamship *El Valle* left Galveston, Tex., for New York, on the 24th. On the 25th, encountered a severe hurricane. Heavy sea struck rudder, breaking off lower end of stock. Rudder pounded about until the 27th at 7.30 a. m., when it was lost altogether. During the storm 2 metallic lifeboats were damaged by heavy seas. Amount of damage unknown.

September 26.—While on a voyage on September 26, a deck hand fell overboard from steamer *Ada B*, when near Valentine plantation, La., and was drowned.

September 29.—About 3.45 p. m., while about 35 miles below New Orleans, in the Mississippi River, while towing steamship *Preston* down the river, stern line of steamer *W. M. Wood* parted, causing tug to keel to port, filling rapidly and sinking in 3 minutes in 115 feet of water. No lives lost. Property loss, $25,000.

October 4.—About 7 a. m. at hotel wharf, Port Eades, from some unknown cause, the bilge of the motor boat *Eureka* had a quantity of gasoline therein, which took fire when the engine lighted the hot tube which is used to ignite the engine, and caused some damage to the pilot house and stern of the boat. Boat has since been repaired.

October 8.—About 2 a. m. fire originated in hold under boilers of steamer *Hoo Hoo* from unknown cause. Efforts to extinguish fire unavailing. Steamer and cargo total loss; steamer $10,000, and cargo, $7,000.

October 13.—We have this day received affidavit signed by Canton P. Seitz, that steamer *Jerome* has for the past 4 months, particularly on the 11th day of October, 1906, been run and operated regularly as a towboat on the Mississippi River and tributaries without a duly licensed engineer or pilot as the law requires. We have this day reported this violation of the law to the collector of customs, New Orleans, for proper action.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—NEW ORLEANS, LA.—Continued.

October 22.—Steamer *H. M. Carter* sunk near Marksville, La. Vessel was raised and repaired. Amount of loss unknown.

November 16.—We have this day received report signed H. F. Weaver, as follows: "Steamer *Anita D.*, from Madisonville to New Orleans, and from New Orleans to Madisonville—Wednesday 14th, 1906, with 20 H. P. Gasl. engine." As this boat has not been inspected, we forwarded this report to the collector of customs, New Orleans, La.

November 16.—About 4.30 p. m., while steamer *City of Greenwood* was making Tonas landing, near mouth of Red River, she struck a snag, causing her to sink. Loss unknown. No lives lost.

November 22.—About 12.15 a. m., steamer *St. John* burned to her decks. She was lying at dock at Spanish Fort, and the origin of fire is unknown. Amount of damage unknown. Boat will be docked and repaired.

November 24.—About 11.45 p. m. steamer *N. S. Hoskins* burned, the hull being almost a total loss. Steamer burned in new basin canal, New Orleans, La. No lives lost. Loss about $5,000.

November 27.—We this day revoked the license of John Henry, marine engineer, for intemperance, he having to our personal knowledge become so addicted to the use of intoxicants as to be almost continually under the influence of liquor.

November 29.—While steamer *Robbie* was tied to the bank at Grand Bayou, receding tide left her grounded and she listed and sunk. Will be raised in a few days. Amount of damage unknown.

November 29.—Coming down Atchafalaya River just above Lagonda Bridge, steamer *Sugarland* collided with steamer *Anton Wilbert*, towing 2 barges of oil. According to report of pilot J. P. Roberts, of steamer *Sugarland*, the pilot on steamer *Anton Wilbert* blew 1 whistle, 300 feet below Lagonda Bridge, for steamer *Sugarland* to pass to the right. Pilot J. P. Roberts of the *Sugarland* answered the signal and governed himself accordingly. Pilot J. P. Roberts seeing the boats would meet in the bridge, blew the danger signal and backed. Pilot on the *Anton Wilbert* answered the danger signal and kept working engines ahead, and steered to starboard. The port barge struck steamer *Sugarland* on port bow, knocking a hole 4 by 10 feet. Steamer *Sugarland* then beached herself in the mud. Investigation of the collision on December 7 showed the collision to be due to error of judgment on the part of pilot J. P. Roberts of the *Sugarland* and his license was suspended for a period of 10 days. Amount of damage unknown. No lives lost.

November.—During the month of November, steamer *Ruth* was tied to the shore, and when the water fell steamer was left on shore, except the stern, which was lowered under water, causing sinking of stern. No apparent damage to hull or machinery. Steamer will be floated soon.

December 2.—About 4.50 a.m. at the head of Custom-house street, during fog, tiller chain of ferry steamer *Josie* parted, and heavy eddy swung the steamer around, causing her to strike steamer *St. James*, tied at the landing, on the fantail. Amount of damage about $900. As a result of investigation held on December 7, inspectors found that the accident was due to unavoidable parting of tiller chain, and no blame attached to any officer.

December 4.—About 12 o'clock at night, steamer *Stella* burned at Greenwood, Miss., from some unknown cause, and cargo and vessel down to the hull were a total loss. No lives lost. Amount of damage $9,000. Insurance, $5,000.

December 7.—On investigation of charges filed against William Burke and James Jordon, charging them with drunkenness while serving as engineers of steamer *J. E. Trudeau*, we find the defendants not guilty of the charges.

December 11.—While making landing at Lower landing, in tow of tug *Taurus*, steamer *St. James* was run into by tug *Major*, towing 2 barges of sugar, breaking bridge tree and new work just completed on after guards of port side of steamer *St. James*.

December 19.—Boiler of steamer *W. T. Scovell* exploded at Gold Dust landing, below Vicksburg, Miss., resulting in wreck of steamer and death of several persons. As a result of investigation of the explosion by inspectors, who personally visited the scene of the accident, they find that no blame can be attached to any of the officers of the boat. They also find that 9 of the crew and 1 passenger was lost, as follows: J. A. Quackenboss, master, L. W. Quackenboss and Joe Schmitt, white; Mac Clark, Jonnie Clark, Granville Woods, Iziah Willis, —— Green, William Hall, colored, all crew, and Laval Yeager, white passenger. Property loss, about $14,000.

December 24.—About 8.30 a.m., after steamer *Istrouma* left her mooring at Baton Rouge, La., Jodn Butler, a colored man, jumped overboard and was drowned, though no effort was made to save him.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—Continued.

LOCAL DISTRICT OF APALACHICOLA, FLA.

February 23.—While the steamer *Gussie* was underway in the cut below Tampa, Fla., and while the engine was being handled with the bar by first assistant engineer, a cap fell from the upper deck. An examination found Raphael Grandall, a Spanish fireman, with his head crushed in, on the upper deck, who died in a few minutes; evidently hit by crosshead of the engine.

March 5.—While the steamer *Gertrude* was underway on the Apalachicola River at Queen City Point, at 3 a. m., Sallie White, colored deck passenger, walked overboard and was drowned.

March 14.—While the steamer *John R. Sharpe* was underway on Flint River, Ga., between Belcher shoals and Fodder Stack shoals, at 7 p. m., Walden Johnson, colored deck hand, accidentally fell overboard and was drowned.

June 24.—While the steamer *Mascotte* was underway in Tampa Bay, Fla., J. F. Sands, of Nassau, New Providence, second-class passenger, fell overboard over the rail into the bay and was drowned.

August 1.—The steamer *Gertrude*, while underway on the Apalachicola River, struck an unknown snag and sunk above Marys landing. No lives lost. Loss of cargo, $250. Steamer has since been raised. Damage and cost of repairs to steamer, $1,500.

August 15.—While the steamer *W. C. Bradley* was underway on the Chattahoochee River, Julius James, colored deck hand, accidentally fell overboard and was drowned just below Eufaula, Ala.

October 8.—While the tugboat *Berenice* was leaving the dredge *Port Royal* at Gadsden Point, Fla., through a mistake made by the engineer in going ahead with engine instead of backing, the steamer collided with dredge *Port Royal*. Damage to dredge, $1,000. No damage to steamer.

October 24.—Eight miles north of Jupiter Light, Fla., at 8 a. m., steamer *Geo. W. Childs* struck on rock (not given on chart), about one-half mile off the beach, with 4½ fathoms around it and 9 feet on it. Shoe carried away.

October 27.—When steamer *Falcon* was underway in Tampa Bay, Fla., piston rod of engine broke, knocking out cylinder head of engine and doing other small damage, estimated at about $200. Chief engineer, Paul A. Larche, slightly scalded in the face.

LOCAL DISTRICT OF GALVESTON, TEX.

February 20.—George Haceiendo Kopolis fell overboard and was drowned from barge *Alice*, while barge was in tow of tug *Mina*, in San Jacinto Bay. Barge dropped and boat lowered, but search was fruitless. Body found February 28, at La Porte, Tex., and buried.

April 23.—Steamer *Chas. Clarke* collided with bark *Leonore* in Port Arthur Canal, unavoidably fouling jib boom of the bark, thereby damaging boat, davits, and awning stanchions of steamer to amount of $300. No one injured.

May 6.—Steamship *El Norte*, when about 53 miles east of Cape Henry and going half speed in dense fog, collided with schooner *Lizzie B. Wiley*, closehauled. The schooner struck the port quarter of steamer, carrying rail and damaging 1 boat; schooner carrying away jib boom and head gear. Whistle fog signals blown by steamer; no fog signals of schooner heard. Steamer laid by and ascertained that schooner needed no assistance, then proceeded on her course for Galveston. Schooner arrived safely at New York. Amount of damage unknown.

June 3.—Tug *Higgins*, while towing oil barge *Gusher* from Sabine to Coalzacolas, Mexico, about 360 miles southwest from Galveston, encountered severe storm, losing rudder, shoe, and rudderpost. Tug made temporary arrangements for steering and returned to Galveston without further mishap. Barge reached Galveston under her own sail safely. Damage to tug, $1,500.

October 31.—About 10.30 p. m. Amos Leavens, fireman, was washed overboard, off Tiger shoals, and drowned, from the tug *Bertha*. Search was made, but body was not recovered. Tug then proceeded to Galveston.

November 11.—Steamer *Oscar G.*, while lying in Lacasine Bayou, a tributary to Mermenton River, was totally destroyed by fire; cause unknown. Value of vessel, $2,000.

December 2.—Steamer *S. G. Rosamond*, while laying up for the night, at Gosport, on the Calcasieu River, from causes unknown, caught fire, burning the house completely off, damaging pipe and boiler connections, etc. Steamer has been repaired at cost of $450.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—GALVESTON, TEX.—Continued.

December 17.—While steamer *Louise*, with barges in tow, was rounding the beacon on east end of Pelican spit, about 12.30 p. m., 1 of the barges collided with said beacon, knocking same down. Matter reported to Commander James H. Sears, inspector eighth light-house district, New Orleans, La. Amount of damage unknown.

LOCAL DISTRICT OF MOBILE, ALA.

January 3.—Steamers *Pleasure Bay*, W. B. Curran, master, and *Jas. A. Carney*, F. A. Lumsden, master, collided in Mobile Bay on morning of December 30, 1905. The *Carney*, which has since been repaired, was damaged to the amount of about $50. The *Pleasure Bay* sustained no damages thereby. Case will be investigated.

January 27.—S. A. Cosper, master Steam packet *Vienna*, reports that said vessel struck a hidden obstruction at Ten-mile shoal, Tombigbee River, on January 19, and sunk. Damages to vessel and cargo cannot be estimated until the vessel is raised, it being very doubtful at this time that vessel will be raised. No one injured.

January 31.—This board reached a decision in case of collision between steamers *Pleasure Bay* and *Jas. A. Carney*, which occurred in Mobile Bay, December 7, 1905, to the effect that the *Carney* caused said collision by making an irregular landing at the wharf where the collision occurred; also that the *Carney* was insufficiently manned at the time. As a result thereof, Captain Lumsden's license was suspended for 30 days for inattention to duty, section 4439, Revised Statutes, and was reported to the collector of customs for employing a pilot who was not qualified, section 4463, Revised Statutes. Jesse Entrekin, who acted as pilot on the occasion of the collision, was reported for serving in a capacity for which he was not licensed, section 4463, Revised Statutes, and his license was suspended for 10 days for violation of section 4442, Revised Statutes. The *Carney* was reported for navigating without a full complement of licensed officers, as required by section 4463, Revised Statutes. Appeal was made from our decision in this case by Captain Lumsden, concerning the suspension of his license, and the case was reopened by the supervising inspector at this office March 6, and, as a result thereof, our action in suspending the license of Captain Lumsden was sustained. The same evidence showed further that W. B. Curran, master of steamer *Pleasure Bay*, was guilty of misconduct, section 4439, Revised Statutes, violating rules 2, 3, and 6, pilot rules for the inland waters of the Atlantic and Pacific coasts, and his license was suspended for 60 days; and the license of John McDowell, pilot of the same vessel, was suspended for 30 days for inattention to duty and negligence, section 4439, Revised Statutes.

March 10.—F. A. Lumsden, master of steamer *Jas. A. Carney* on occasion of the collision above mentioned, failed to surrender his suspended license, as required by section 12, Rule V, general rules and regulations, and in consequence thereof his license was given a further suspension of 30 days, commencing March 2, 1906. His license was promptly surrendered to us on notification to him of this second suspension for misconduct, section 4439, Revised Statutes.

April 3.—Steamship *Farnsworth*, T. J. Tones, master, was damaged by fire to the extent of $1,000, while lying at her wharf at Scranton, Miss., on night of March 28. Origin of fire is not known. Vessel has since been repaired. No person injured.

April 6.—P. L. Dotson, master steam packet *Alert*, reports that deck hand Wilson Lewis was accidentally drowned at Eutaw, Ala., Little Bigbee River, while assisting in repairing the wheel of that vessel.

May 14.—Steamship *Venture*, C. Scheuermann, master, was partially destroyed by fire while lying at her mooring, Mobile River, on night of May 11. Damages, about $150. Origin of fire is not known. No person injured. Vessel has since been repaired.

May 22.—E. O. Smith, master of American steamship *Colorado*, reports that on May 7, near beacon No. 14, Mobile ship channel, the Norwegian steamship *Hispannia* collided with his vessel, smashing in about 50 feet of his vessel's port side abaft of the fore rigging and doing other damage. Master claims that his vessel gave proper signal to pass to the starboard and that the *Hispannia* came ahead at full speed and sheared when nearly opposite him, causing the collision. No person injured. Damages not stated.

June 23.—Amos Travis, master steam packet *Hard Cash*, reports that deck hand Ike Mollett was accidentally drowned while the vessel was underway on Alabama River on morning of June 12. The deceased was standing on the lower deck forward, when he must have lost his balance.

August 7.—J. R. Johnson, master steam packet *Cornelia C.*, reports that on July 27, while underway on Tombigbee River, deck hand Ed Hillard was accidentally drowned while engaged in washing his clothes on the lower deck of said vessel. Crew stood by to rescue him, but he failed to rise.

CASUALTIES, VIOLATIONS OF LAW, AND INVESTIGATIONS, YEAR ENDED DECEMBER 31, 1906—TENTH SUPERVISING DISTRICT—MOBILE, ALA.—Continued.

September 4.—T. O. Stone, ex-chief engineer of steamer *Ouachita*, of this port, was suspected of having substituted an iron plug for a regulation fusible plug in the boiler of that vessel, and in consequence thereof we held an investigation at this office on September 11 for the purpose of fixing the guilt on the person who committed the deed. From the evidence taken, and by the suspects on admission, we found that Mr. Stone was guilty, and therefore refused to renew his license of chief engineer, which license had expired some days before the investigation, for the willful violation of section 4441, Revised Statutes, viz, misconduct and neglect of duty; and in addition thereto we reported him to the U. S. district attorney for a violation of section 4437, Revised Statutes, viz, intentionally deranging a device employed to denote the state of water in a marine boiler. This case was submitted to the grand jury at the November term of court, and it failed to return a bill against Mr. Stone.

September 26 and 27.—This section of the Gulf coast was visited by a hurricane of unprecedented violence, the greatest damage being done on morning of 27th. The points most affected by the storm are Mobile and Pensacola. At the former place we have about 48 (this number given in official report of revenue officer) able vessels either stranded on our shores from mouth of river to Three Mile Creek, distance of 4 miles, or sunk. This number is exclusive of barges, launches, and small sail vessels. We are unable to estimate damages at Pensacola and the Mississippi coast, as the newspaper reports therefrom are very contradictory. Reports of individual losses will be forwarded as they come in.

October 3.—N. A. Staples, master steam packet *Mary S. Blees*, reports that on September 27 the storm blew said vessel from her moorings on east side of river to the city side, damaging her to the amount of $2,000. No lives lost and no one injured. Vessel has since been repaired.

October 11.—Steamship *Nelley Keyser*, of Pensacola, Fla., Rudolph Wahl, master, was blown from her docks September 27 and totally destroyed by pounding on beach. Loss, $5,000. No one injured.

October 11.—Steamship *Helen*, of Pensacola, Fla., W. E. Brown, master, reports that on morning of September 27 the docks to which his vessel was moored were wrecked by the storm and his vessel driven ashore and totally destroyed. Loss, $3,500. No one injured.

October 12.—Steamship *Angelo*, of Pensacola, Fla., W. H. Baker, master, reports that on September 27 the docks to which his vessel was moored were wrecked by the storm and his vessel driven ashore and totally destroyed. Loss, $6,000. No one injured.

October 13.—C. H. Eldridge, master steamship *Mary Wittich*, of Mobile, Ala., reports that on September 27 his vessel was driven ashore from her moorings in lower Mobile Bay and damaged to the amount of $2,000. Vessel has been floated and repaired. No lives lost.

October 20.—W. C. Spotswood, master steamship *Amelia*, of Mobile, Ala., reports that on September 27 his vessel was lying at her dock, Mobile, with steam up and full crew on board, and that the force of the storm of that date was so great that the vessel could not be handled, and sunk, damaging her to the amount of $2,000. No one injured.

October 20.—W. C. Spotswood, master steam packet *J. P. Schuh*, of Mobile, Ala., reports that on September 27 his vessel was driven ashore by the storm and damaged to the extent of $4,000. The vessel was out of commission at the time, with no one on board but the watchman. No one injured.

October 20.—Steam packet *Nettie Quill*, of Mobile, Ala., John Quill, master, while lying at her dock, was damaged to the extent of $2,500 by the force of the storm of the 27th. Vessel has since been repaired. No one injured.

October 20.—John Quill, master steam packet *Mary*, of Mobile, Ala., reports that on September 27, while said vessel was laid up, the storm blew her from her moorings on east side of river to the city side, where she was totally destroyed. Loss, $12,000. No one injured.

October 24.—E. A. Rogers, master steam packet *Capt. Fritz*, of Pensacola, Fla., reports that on September 27 said vessel was driven ashore at Pensacola and damaged to the extent of $1,000. Vessel has since been floated and repaired. No one injured.

December 27.—J. G. B. Rouse, master steam packet *Sun*, reports that his vessel struck a snag in Mobile Bay on December 14, 1905, at 6.30 p. m., and sunk. Estimated damages, $350. Vessel is being raised for repairs. This vessel was en route from New Orleans, La., to Pensacola, Fla., her future home port, and called in this port for coal.

Inspections of Boilers of United States Government Steamers and Buildings.

In addition to the regular annual inspections, boilers on or for United States Government vessels and in United States Government buildings were inspected by officers of the Steamboat-Inspection Service during the year ended December 31, 1906, as follows:

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
San Francisco, Cal.:			
Steamers—			
Meade	San Francisco, Cal	Jan. 13	7
Sheridan No. 2	do	Jan 18	1
Sheridan No. 3	do	do	1
Meade	do	Jan. 26	2
Meade No. 1	do	Feb. 8	1
Buford	do	Mar. 8	2
Buford No. 1	do	Mar. 9	1
Madrono	do	Apr. 6	2
Argonaut	do	Apr. 16	1
Argonaut (launch)	do	do	1
Light-ship No. 70	do	May 31	1
Light-ship No. 83	Oakland, Cal	June 1	1
Sherman	San Francisco, Cal	July 17	4
Sherman No. 1	do	July 24	1
Sherman No. 2	do	do	1
Thomas	do	Aug. 28 Aug. 30	3 1
Thomas No. 3	do	Aug. 30	1
Slocum	do	Sept. 11	2
Buford No. 1	do	Dec. 17	1
Buford	do	Dec. 17 Dec. 18	2 1
Building—			
Quarantine Station	Angel Island, Cal	Mar. 16 Apr. 12	2
Total			41
Portland, Oreg.:			
Vessels—			
Columbine	Portland, Oreg	Apr. 20	2
Light-vessel No. 50	Astoria, Oreg	Oct 6	2
Heather	do	Oct. 19	2
Light-vessel No. 67	do	do	2
Light-vessel No. 76	do	Nov. 26	2
W. S. Ladd	do	Dec. 26	2
Total			12
Seattle, Wash.:			
Steamers—			
Burnside	Tacoma, Wash	Mar. 15	2
McArthur	Sidney, Wash	Mar. 30	1
Gedney	Eagle Harbor, Wash	Apr. 20	1
McArthur	do	May 1	1
Burnside	Seattle, Wash	July 24	2
Major Evan Thomas	do	Sept. 17 Sept. 27	1 1
Dix	Bremerton, Wash	Nov. 5	5
Gedney	Seattle, Wash	Nov. 13	1
Patterson	do	Nov. 15	1
Buildings—			
Diamond Head quarantine station	Port Townsend, Wash	June 12	3
Total			19
New York, N. Y.:			
Vessels—			
Larkspur	Tompkinsville, N. Y	Mar. 7	2
John Rodgers	do	Mar. 14	1
Williams	New York, N. Y	Mar. 17	1
Gardenia	Tompkinsville, N. Y	Mar. 20	2
General Joseph E. Johnstone	New York, N. Y	Mar. 24	2
Light-ship No. 58	Fire Island, N. Y	Mar. 29	1
Daisy	West New Brighton, N. Y	Apr. 2	1
Canby	New York, N. Y	Apr. 7	1
Immigrant	Ellis Island, N. Y	Apr. 12	1
Ellis Island	Brooklyn, N. Y	do	2
Light-ship No. 78	Tompkinsville, N. Y	Apr. 13	2
General Meigs	New York, N. Y	Apr. 14	1
Armeria (light-house tender)	Tompkinsville, N. Y	Apr. 17 Oct. 11	1
Armeria (launch)	do	Apr. 17 Oct. 11	1

IONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

section district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
Y.—Continued.			
ontinued.			
ship No. 51	Tompkinsville, N. Y.	July 20	2
oe	do	Aug. 28	1
	do	Sept. 11	1
	do	Sept. 11	2
–			
house and post-office	New York, N. Y.	May 7	1
	Newark, N. J.	May 12 May 19	3
	Brooklyn, N. Y.	Mar. 15 May 17 June 25 June 26	6
asury	New York, N. Y.	June 9	1
ration station	Ellis Island, N. Y.	June 20 Oct. 16	8
y Academy	West Point, N. Y.	July 13 July 16 July 18 July 20 July 23 July 25	26
l			70
:			
wer (tender)	Boston, Mass.	Feb. 21	3
ship No. 54	do	Sept. 11	2
arwood	do	Sept. 28	1
–			
ffice and subtreasury	do	June 26 July 9	3 4
ration station	do	Sept. 29	1
c-light plant	Fort Revere, Hull, Mass	Nov. 26	1
ndrew	Boston Harbor	Dec. 28	1
tandish	do	do	1
Heath	Winthrop, Mass	Dec. 31	1
Banks	do	do	1
l			19
Pa.:			
Sam	Camden, N. J.	Mar. 23	1
vessel No. 69	Philadelphia, Pa.	May 17	2
vessel No. 79	do	June 6	2
	do	June 22	2
vessel No. 44	do	July 23	2
ne	Wilmington, Del.	July 26	1
vessel No. 52	Philadelphia, Pa.	Oct. 17	2
–Mint	do	Oct. 6	4
l			16
Conn.:			
	New London, Conn.	Feb. 28	1
ship No. 48	Cornfield Point, Conn.	Feb. 26	2
ship No. 73	Riverside, Conn.	Sept. 5	2
–			
I. G. Wright	Fishers Island, N. Y.	Aug. 23 Aug. 31 Sept. 7	3
Mansfield	Napatree Point, R. I.	Aug. 13 Sept. 12 Oct. 5	3
Ferry	Plum Island, N. Y.	Aug. 16 Aug. 20	4
l			15
um	Portland, Me.	Apr. 3 Apr. 4	1
	do	Apr. 9	1
	do	June 22 June 23	1

INSPECTIONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
Portland, Me.—Continued.			
Vessels—Continued.			
Light-vessel No. 74	South Portland, Me	June 27	1
Do	do	June 28	1
Weitzel	Portland, Me	Dec. 20	1
Total			6
Providence, R. I.:			
Vessels—			
Light-vessel No. 66	Fairhaven, Mass	Feb. 5	1
Light-vessel No. 41	do	Feb. 24	2
Light-vessel No. 47	New Bedford, Mass	Apr. 21	2
Brentons Reef light-vessel	Brentons Reef	July 19	2
Inca (Naval Militia)	Fall River, Mass	Dec. 4	2
Total			9
New Haven, Conn.:			
Building—Custom-house and post-office	New Haven, Conn	July 2	2
Norfolk, Va.:			
Vessels—			
Roanoke	Norfolk, Va	May 16	1
Phillips	Old Point Comfort, Va	July 12	1
Hydrographer	Norfolk, Va	Sept. 26	1
Building—Light-house	Cape Henry, Va	Dec. 4	2
Total			5
Baltimore, Md.:			
Vessels—			
Maple	Baltimore, Md	Mar. 26	3
Lieut. Alonzo H. Cushing	Fort Washington, Md	Apr. 27	1
Holly	Baltimore, Md	Apr. 3	1
Violet	do	Apr. 19	1
Light-vessel No. 80	do	May 21	2
Light-vessel No. 72	do	June 16	2
Jessamine	do	June 25	1
Thistle	do	June 30	1
Explorer	do	July 2	2
Light-vessel No. 71	do	July 31	3
Light-vessel No. 49	do	Aug. 22	2
Endeavor	do	Sept. 14	1
Buildings—			
Fort Washington	Fort Washington, Md	Apr. 27	9
Fort Hunt	Fort Hunt, Md	May 1	5
Government Printing Office	Washington, D. C	Dec. 12	3
Total			37
Charleston, S. C.:			
Vessels—			
Dredge No. 3	Georgetown, S. C	Jan. 20	1
Reid Whitford	do	do	2
Great Pee Dee	do	do	1
Light-vessel No. 53	Charleston, S. C	Feb. 8	2
Ajax	Wilmington, N. C	Apr. 16	1
Cynthia	do	Apr. 17	1
Richard Caswell	do	do	1
Genl. H. G. Wright	do	do	1
Mercur	do	do	1
Light-vessel No. 53	Charleston, S. C	May 8	2
Wistaria	do	July 12	1
Wateree	Georgetown, S. C	Oct. 24	1
Great Pee Dee	do	do	1
Total			16
St. Louis, Mo.:			
Steamers—			
Lily	St. Louis, Mo	Apr. 7	1
		Apr. 16	2
H. G. Wright	do	May 24	5
Grace	Keokuk, Iowa	July 10	2
David Tipton	do	do	2
Hecla	do	do	2
Phœnix	do	do	1
Col. A. McKenzie	do	Sept. 1	4
Building—Court-house and post-office	do	July 10	1
Total			20

INSPECTIONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
uque, Iowa:			
Steamers—			
Drill boat No. 103	Moline, Ill	June 26	1
Drill boat No. 6	do	do	1
Ajax (dredge)	do	do	1
Boom dredge No. 220	do	do	1
Ruth	do	June 27	2
Mac	do	do	1
Emily	do	do	1
Vulcan (dredge)	Rock Island, Ill	do	1
Elinor	Dubuque, Iowa	July 9	4
Geyser (dredge)	do	do	1
Louise	do	do	1
Fury	Fountain City, Wis	Aug. 7	2
Elsie	do	do	1
Ada	do	do	1
Alert	do	do	1
Total			20
uth, Minn.:			
Building—Station of Commission of Fish and Fisheries.	Duluth, Minn	Sept. 18	2
isville, Ky.:			
Steamers—			
Derrick boat No. 1	Bowling Green, Ky	Apr. 26	1
Derrick boat No. 2	do	do	1
Emerald	do	do	1
Wm. Preston Dixon	do	do	3
Dredge boat No. 2	Frankfort, Ky	June 5	1
Gen. O. M. Poe	do	June 6	2
Derrick boat No. 1	do	do	1
Derrick boat No. 2	do	do	1
Dredge boat No. 1	do	June 19	1
Gen. O. M. Poe	do	do	1
Willow Point	Louisville, Ky	June 25	1
Major Mackenzie	do	do	4
Ohio (dredge)	Chenaults Reach, Ky	Oct. 4	1
Oswego (dredge)	do	do	1
Buildings—			
Coal elevator, lock No. 4	do	June 7	1
Yard engine house, lock No. 4	do	do	1
Canal lock wall	Louisville, Ky	June 25	2
Canal saw mill	do	do	1
Canal machine shop	do	do	1
Service—United States Army	Frankfort, Ky	June 6	7
Total			33
nsville, Ind.:			
Building—Marine hospital	Cairo, Ill	May 15	2
hville, Tenn.:			
Steamers—			
Cumberland	Lock No. 2, Cumberland River.	Feb. 12	2
John	do	do	1
Henry	do	do	1
Stephen H. Long	Mussel Shoals Canal	Apr. 13	1
McPherson	do	do	2
Lookout	do	do	2
Total			9
uphis, Tenn.:			
Steamers—			
Oleander	Memphis, Tenn	Apr. 24	2
Chisca	do	May 15	4
Titan	do	do	3
Mississippi	do	June 21	3
Patrol	do	do	2
Sachem	do	do	6
Search	do	do	2
Venus	do	do	1
Wynoka	do	do	6
Choctaw	do	June 26	6
Iota (dredge)	do	do	7
Kappa (dredge)	do	do	7

INSPECTIONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
Memphis, Tenn.—Continued.			
Steamers—Continued.			
Cleveland (snag boat)	Batesville, Ark	July 13	1
H. L. Abbott	Memphis, Tenn	July 17	1
Itasca	do	do	1
H. M. Graham	do	July 24	2
Quapaw	Newport, Ark	Aug. 9	3
John N. Macomb	Memphis, Tenn	Aug. 20	5
Building—Marine hospital	do	May 22	1
Total			63
Cincinnati, Ohio:			
Steamers—			
E. A. Woodruff	Cincinnati, Ohio	May 9	6
Golden Rod	do	June 6	2
Total			8
Pittsburg, Pa.:			
Steamers—			
T. P. Roberts	Pittsburg, Pa	June 27	2
Wenonah	do	Nov. 3	1
Buildings—Post-office	do	Apr. 21 May 12	3 3
Total			9
Point Pleasant, W. Va.:			
Steamer—Vega	Zanesville, Ohio	Aug. 22	2
Detroit, Mich.:			
Vessels—			
Marigold	Detroit, Mich	Mar. 24 Mar. 26	1 1
Light-ship No. 59	do	Mar. 24	1
Light-ship No. 61	do	do	1
Amaranth	do	Mar. 27	2
Search	do	May 8 Dec. 5	1
Lake Survey No. 1	do	do May 16	1
Surveyor	do	do Dec. 5	1
Buildings—			
Post-office	do	Oct. 23 Dec. 26	2 2
Old Federal building	do	do Dec. 29	1 1
Total			15
Chicago, Ill.:			
Vessels—			
Industry	Waukegan, Ill	July 30	1
Dredge No. 1	do	do	1
Pile driver No. 1	do	do	1
Pile driver No. 2	do	do	1
Derrick No. 1	do	do	1
Dearborn	Chicago, Ill	do	1
Total			6
Grand Haven, Mich.:			
Vessels—			
Light-vessel No. 55	Cheboygan, Mich	Mar. 8	1
Light-vessel No. 56	do	do	1
Light-vessel No. 57	do	do	1
Light-vessel No. 62	do	May 23	1
Total			4
Buffalo, N. Y.:			
Steamers—			
Haze	Buffalo, N. Y	Apr. 2	1
Warrington	do	Apr. 6	1
Gen. John M. Wilson	do	May 19	1
Service—			
Isthmian Canal Commission	Erie, Pa	Sept. 20 Sept. 29	2 2
Total			7

INSPECTIONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
New Orleans, La.:			
Vessels—			
Magnolia	New Orleans, La	Feb. 6	2
General Abbot	do	Apr. 3	1
General Gillespie	do	do	1
Sabine	do	May 5	1
Columbia	Vicksburg, Miss	Oct. 8	2
Southwest Pass light-ship	New Orleans, La	Nov. 2	2
Heald Bank light-ship	do	Dec. 11	2
Building—Mint	do	Dec. 14	2
Total			13
Galveston, Tex.:			
Buildings—			
Post-office and custom-house	El Paso, Tex	Apr. 28	3
Post-office	Galveston, Tex	May 15	1
Total			4
Mobile, Ala.:			
Steamers—			
Arbutus	Mobile, Ala	Aug. 10	2
Ivy	do	Aug. 17	2
Total			4
Grand total			488

HULLS OF UNITED STATES GOVERNMENT VESSELS INSPECTED.

In addition to the regular annual inspections, hulls of United States Government vessels were inspected by officers of the Steamboat-Inspection Service during the year ended December 31, 1906, as follows:

Local inspection district.	Name of vessel.	Port where inspected.	Date inspected.
Louisville, Ky	Gen'l O. M. Poe (steamer)	Carrollton, Ky	June 21
Do	Dredge boat No. 1	Valley View, Ky	July 18
Do	Dredge boat No. 2	do	Do.
Do	Derrick boat No. 1	do	Do.
Do	Derrick boat No. 2	do	Do.
Do	Ohio (dredge boat)	Chenaults Reach, Ky	Oct. 4
Do	Oswego (dredge boat)	do	Do.
Memphis, Tenn	Cleveland (steamer)	Batesville, Ark	July 13
Do	Quapaw (steamer)	Newport, Ark	Aug. 9

NOTE.—The tables showing the inspection of domestic and foreign steamships made in the various inspection districts during the year, which appear in the separate edition of the Annual Report of the Supervising Inspector-General, have been omitted from this volume. See note on page 338.

ANNUAL CERTIFICATES OF INSPECTION AND CERTIFICATES OF EXAMINATION ISSUED TO FOREIGN STEAM VESSELS BY THE INSPECTORS DURING THE FISCAL YEAR ENDED JUNE 30, 1907.

Nationality.	Number.	Gross tonnage.
British	219	1,206,822
German	78	616,085
Norwegian	28	36,508
Italian	19	111,287
French	14	102,844
Dutch	14	91,966
Japanese	14	82,479
Spanish	7	35,840
Russian	6	36,702
Austrian	6	29,940
Cuban	4	8,717
Danish	4	38,254
Belgian	2	19,133
Brazilian	2	3,623
Portuguese	1	2,744
Mexican	1	166
Total	419	2,423,304

REPORT

OF THE

LIGHT-HOUSE BOARD

Inspections of Boilers of United States Government Steamers and Buildings.

In addition to the regular annual inspections, boilers on or for United States Government vessels and in United States Government buildings were inspected by officers of the Steamboat-Inspection Service during the year ended December 31, 1906, as follows:

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
San Francisco, Cal.:			
Steamers—			
Meade	San Francisco, Cal	Jan. 13	7
Sheridan No. 2	do	Jan 18	1
Sheridan No. 3	do	do	1
Meade	do	Jan. 26	2
Meade No. 1	do	Feb. 8	1
Buford	do	Mar. 8	3
Buford No. 1	do	Mar. 9	1
Madrono	do	Apr. 6	2
Argonaut	do	Apr. 16	1
Argonaut (launch)	do	do	1
Light-ship No. 70	do	May 31	1
Light-ship No. 83	Oakland, Cal	June 1	1
Sherman	San Francisco, Cal	July 17	4
Sherman No. 1	do	July 24	1
Sherman No. 2	do	do	1
Thomas	do	Aug. 28	3
		Aug. 30	1
Thomas No. 3	do	Aug. 30	1
Slocum	do	Sept. 11	2
Buford No. 1	do	Dec. 17	1
Buford	do	Dec. 17	2
		Dec. 18	1
Building—			
Quarantine Station	Angel Island, Cal	Mar. 16 Apr. 12	2
Total			41
Portland, Oreg.:			
Vessels—			
Columbine	Portland, Oreg	Apr. 20	2
Light-vessel No. 50	Astoria, Oreg	Oct 6	2
Heather	do	Oct. 19	2
Light-vessel No. 67	do	do	2
Light-vessel No. 76	do	Nov. 26	2
W. S. Ladd	do	Dec. 26	2
Total			12
Seattle, Wash.:			
Steamers—			
Burnside	Tacoma, Wash	Mar. 15	2
McArthur	Sidney, Wash	Mar. 30	1
Gedney	Eagle Harbor, Wash	Apr. 20	1
McArthur	do	May 1	1
Burnside	Seattle, Wash	July 24	2
Major Evan Thomas	do	Sept. 17	1
		Sept. 27	1
Dix	Bremerton, Wash	Nov. 5	3
Gedney	Seattle, Wash	Nov. 13	1
Patterson	do	Nov. 15	1
Buildings—			
Diamond Head quarantine station	Port Townsend, Wash	June 12	3
Total			19
New York, N. Y.:			
Vessels—			
Larkspur	Tompkinsville, N. Y	Mar. 7	2
John Rodgers	do	Mar. 14	1
Williams	New York, N. Y	Mar. 17	1
Gardenia	Tompkinsville, N. Y	Mar. 20	1
General Joseph E. Johnstone	New York, N. Y	Mar. 24	2
Light-ship No. 58	Fire Island, N. Y	Mar. 29	2
Daisy	West New Brighton, N. Y	Apr. 2	1
Canby	New York, N. Y	Apr. 7	1
Immigrant	Ellis Island, N. Y	Apr. 12	1
Ellis Island	Brooklyn, N. Y	do	1
Light-ship No. 78	Tompkinsville, N. Y	Apr. 13	2
General Meigs	New York, N. Y	Apr. 14	2
Armeria (light-house tender)	Tompkinsville, N. Y	Apr. 17 Oct. 11	1
Armeria (launch)	do	Apr. 17 Oct. 11	1

INSPECTIONS OF BOILERS OF UNITED STATES GOVERNMENT STEAMERS AND BUILDINGS—Continued.

Local inspection district, and name of vessel, building, or service.	Port where inspected.	Date inspected.	Boilers inspected.
New York, N. Y.—Continued.			
Vessels—Continued.			
Light-ship No. 51	Tompkinsville, N. Y.	July 20	2
Mistletoe	do	Aug. 28	1
Nettle	do	Sept. 11	1
Iris	do	Sept. 11	2
Buildings—			
Court-house and post-office	New York, N. Y.	May 7	1
Do	Newark, N. J.	May 12 May 19	3
Do	Brooklyn, N. Y.	Mar. 15 May 17 June 25 June 26	6
Subtreasury	New York, N. Y.	June 9	1
Immigration station	Ellis Island, N. Y.	June 20 Oct. 16	8
Military Academy	West Point, N. Y.	July 13 July 16 July 18 July 20 July 23 July 25	26
Total			70
Boston, Mass.:			
Vessels—			
Mayflower (tender)	Boston, Mass.	Feb. 21	3
Light-ship No. 54	do	Sept. 11	2
Col. Harwood	do	Sept. 28	1
Buildings—			
Post-office and subtreasury	do	June 26 July 9	3 4
Immigration station	do	Sept. 29	1
Electric-light plant	Fort Revere, Hull, Mass	Nov. 26	1
Fort Andrew	Boston Harbor	Dec. 28	1
Fort Standish	do	do	1
Fort Heath	Winthrop, Mass.	Dec. 31	1
Fort Banks	do	do	1
Total			19
Philadelphia, Pa.:			
Vessels—			
Uncle Sam	Camden, N. J.	Mar. 23	1
Light-vessel No. 69	Philadelphia, Pa.	May 17	2
Light-vessel No. 79	do	June 6	2
Zizania	do	June 22	2
Light-vessel No. 44	do	July 23	2
Neptune	Wilmington, Del.	July 26	1
Light-vessel No. 52	Philadelphia, Pa.	Oct. 17	2
Buildings—Mint	do	Oct. 6	4
Total			16
New London, Conn.:			
Vessels—			
Cactus	New London, Conn.	Feb. 28	1
Light-ship No. 48	Cornfield Point, Conn.	Feb. 26	2
Light-ship No. 73	Riverside, Conn.	Sept. 5	2
Buildings—			
Fort H. G. Wright	Fishers Island, N. Y.	Aug. 23 Aug. 31 Sept. 7	3
Fort Mansfield	Napatree Point, R. I.	Aug. 13 Sept. 12 Oct. 5	3
Fort Terry	Plum Island, N. Y.	Aug. 16 Aug. 20	4
Total			15
Portland, Me.:			
Vessels—			
Geranium	Portland, Me.	Apr. 3 Apr. 4	1
Do	do	Apr. 9	1
Lilac	do	June 22 June 23	1

SEVENTH DISTRICT.

Inspector.—Commander JOHN HOOD, U. S. Navy, Key West, Fla.
Engineer.—Maj. WILLIAM E. CRAIGHILL, Corps of Engineers, U. S. Army, Mobile, Ala.

EIGHTH DISTRICT.

Inspector.—Lieut. Commander GUY W. BROWN, U. S. Navy, New Orleans, La.
Engineer.—Maj. WILLIAM E. CRAIGHILL, Corps of Engineers, U. S. Army, Mobile, Ala.

NINTH DISTRICT.

Inspector.—Commander JOHN M. ORCHARD, U. S. Navy, Chicago, Ill.
Engineer.—Maj. WILLIAM W. JUDSON, Corps of Engineers, U. S. Army, Milwaukee, Wis.

TENTH DISTRICT.

Inspector.—Commander FRANK M. BOSTWICK, U. S. Navy, Buffalo, N. Y.
Engineer.—Col. HENRY M. ADAMS, Corps of Engineers, U. S. Army, Buffalo, N. Y.

ELEVENTH DISTRICT.

Inspector.—Commander JAMES T. SMITH, U. S. Navy, Detroit, Mich.
Engineer.—Maj. CHARLES KELLER, Corps of Engineers, U. S. Army, Detroit, Mich.

TWELFTH DISTRICT.

Inspector.—Commander ROBERT F. LOPEZ, U. S. Navy, San Francisco, Cal.
Engineer.—Maj. CHARLES H. MCKINSTRY, Corps of Engineers, U. S. Army, San Francisco, Cal.

THIRTEENTH DISTRICT.

Inspector.—Commander PERCIVAL J. WERLICH, U. S. Navy, Portland, Oreg.
Engineer.—Lieut. Col. SOLOMON W. ROESSLER, Corps of Engineers, U. S. Army, Portland, Oreg.

FOURTEENTH DISTRICT.

Inspector.—Commander WILLIAM BRAUNERSREUTHER, U. S. Navy, Cincinnati, Ohio.
Engineer.—Lieut. Col. WILLIAM T. ROSSELL, Corps of Engineers, U. S. Army, Cincinnati, Ohio.

FIFTEENTH DISTRICT.

Inspector.—Commander LOUIS S. VAN DUZER, U. S. Navy, St. Louis, Mo.
Engineer.—Col. CLINTON B. SEARS, Corps of Engineers, U. S. Army, St. Louis, Mo.

SIXTEENTH DISTRICT.

Inspector.—Commander SIMON COOK, U. S. Navy, Memphis, Tenn.
Engineer.—Capt. WILLIAM D. CONNOR, Corps of Engineers, U. S. Army, Memphis, Tenn.

REPORT

OF THE

LIGHT-HOUSE BOARD.

DEPARTMENT OF COMMERCE AND LABOR,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, October 7, 1907.

SIR: The Light-House Board has the honor to submit the following report:

There are under the control of the Light-House Establishment the following-named aids to navigation:

Light-houses and beacon lights	1,479
Light-vessels in position	49
Light-vessels for relief	11
Gas-lighted buoys in position	153
Fog signals operated by steam, caloric, or oil engines, about	217
Fog signals operated by machinery (clockwork), about	246
Post lights, about	1,964
Day or unlighted beacons, about	595
Whistling buoys in position, about	92
Bell buoys in position, about	152
Other buoys in position, including stakes and buoys in Porto Rican, Hawaiian, and Alaskan waters	5,365

In the construction, care, and maintenance of these aids to navigation there are employed—

Steam tenders	43
Steam launches	3
Sailing tenders	1
Light-keepers, about	1,585
Officers and crews of light-vessels and tenders, about	1,400
Laborers in charge of post lights, about	1,760
Laborers and mechanics under light-house engineers, about	560

There were some 20 lights discontinued during the year, mostly small inexpensive lights.

APPROPRIATIONS MADE AT THE SECOND SESSION OF THE FIFTY-NINTH CONGRESS FOR THE LIGHT-HOUSE ESTABLISHMENT.

Supplies of light-houses	$600,000
Repairs and incidental expenses of light-houses	800,000
Salaries of keepers of light-houses	950,000
Expenses of light-vessels	625,000
Expenses of buoyage	700,000
Expenses of fog-signals	235,000
Lighting of rivers	375,000
Survey of light-house sites	1,000
Oilhouses for light-stations	15,000
Maintenance of lights on channels of Great Lakes	4,000
Pointe au Pelee light-vessel, Lake Erie	4,000

Special works.

SECOND DISTRICT.

Nantucket Shoals light-vessel, Massachusetts (completing)	$65,000
Buzzards Bay (Hen and Chickens) light-vessel, Massachusetts (completing)	65,000
Hedge Fence Shoal light-vessel, Massachusetts	115,000

THIRD DISTRICT.

Prudence Island light-station, Rhode Island, purchase of land	$540
Tender for inspector, Third light-house district (completing)	150,000
Staten Island light-house depot, New York, lamp shop	25,000
Ambrose Channel light-vessel, New York (completing)	65,000
Tender for engineer, Third light-house district	25,000
Passaic light-station, New Jersey, light and fog-signal	15,000
Lloyd and Huntington harbors light-station New York, light and fog-signal	40,000

THIRD SUBDISTRICT.

Tender for Porto Rico	$200,000

FOURTH DISTRICT.

Miah Maul Shoal light-station, Delaware Bay (completing)	$35,000
Relief light-vessel, Fourth light-house district	115,000

FIFTH DISTRICT.

Ragged Point light-station, Potomac River (completing)	$15,000
La Trappe River Range lights, Maryland	10,000
Washington, D. C., light-house depot, wharf	30,000

SIXTH DISTRICT.

Tender for inspector, Sixth light-house district (completing)	$70,000
Brunswick light-vessel, Georgia (completing)	50,000

SEVENTH DISTRICT.

Tender for inspector, Seventh light-house district	$200,000

EIGHTH DISTRICT.

Tender for inspector, Eighth light-house district	$60,000
Horn Island light-station, Mississippi	10,000
Repairing and rebuilding aids to navigation, Eighth light-house district	69,000

NINTH DISTRICT.

Milwaukee Breakwater light-station, Wisconsin, light and fog-signal	$50,000
Menominee Harbor light-station, Michigan, site for dwelling	1,200
White Shoal light-station, Lake Michigan, light and fog-signal	250,000
Fox River and Lake Winnebago post lights	500

ELEVENTH DISTRICT.

Duluth Range light-station, Michigan (purchase of land)	$200
Tender for Lake Superior (completing)	60,000
Rock of Ages light-station, Michigan (completing)	50,000
Martins Reef light-vessel, Lake Michigan (completing)	20,000
Split Rock light-station, Lake Superior, light and fog-signal	75,000
Munising Range light-station, Grand Island Harbor, Michigan	15,000

TWELFTH DISTRICT.

Tender for Twelfth light-house district (completing)	$165,000
Point Cabrillo light-station, California (completing)	25,000
Relief light-vessel for Pacific coast	130,000
Carquinez Strait light-station, California, light and fog-signal	50,000
Tender for Pacific Ocean	215,000
Repairing and rebuilding aids to navigation, Twelfth light-house district	17,500

TWELFTH SUBDISTRICT.

Molokai light-station, Hawaii, light and fog-signal	$60,000

THIRTEENTH DISTRICT.

Hinchinbrook Entrance light-station, Alaska (continuing construction)	$50,000
Columbia River light-vessel, Oregon (completing)	80,000
Tender for inspector, Thirteenth light-house district (completing)	140,000
Swiftsure Bank light-vessel, Washington	130,000
Cape Arago light-station, Oregon (rebuilding)	20,000
Battery Point fog-signal, Washington (additional)	8,000

FIFTEENTH DISTRICT.

Tender for inspector, Fifteenth light-house district	$60,000

GENERAL.

Light-keepers' dwellings	$75,000

REIMBURSEMENTS.

The Board submits herewith, together, its recommendations as to appropriations needed for reimbursements heretofore asked in separate special estimates for the sums needed in the several light-house districts:

Reimbursement of owners of the schooner Thomas W. H. White for damages inflicted on her by the light-house tender Lilac.—The following is a copy of a letter, dated October 27, 1904, from the Department of Commerce and Labor to the Treasury Department:

This Department has the honor, at the instance of the Light-House Board, to state that the light-house tender *Lilac* came in collision wih the schooner *Thomas W. H. White*, belonging to the South Gardiner Lumber Company, of Gardiner, Me., when damages to the extent of $260.02 were inflicted on the schooner.

The Board has made a careful examination of the matter and finds that the accident occurred during a rapid formation of vapor over broken ice in the vicinity, obscuring the previously fair view and rendering navigation difficult, so that the *Lilac* was slowed down to a low rate of speed, minimizing the mishap that followed.

Both vessels claim to have been making the usual fog-signal, but owing to the clashing of the ice and other noises the bell of the schooner was not heard by the light-house tender in time to prevent a collision.

The inspector of the First light-house district, after forwarding the report made in the case by the master of the tender, states that the master has always sustained a reputation for prudence, efficiency, and good judgment, as well as coolness in emergency. The inspector further states that he does not regard him as being more than slightly, if at all, blamable, and commends him for his prompt action in taking care of the injured vessel.

The Board, after careful examination of the matter, is of opinion that the damages done to the schooner by the light-house tender *Lilac* should be paid for by the Light-House Establishment, but in view of the recent decision of the Comptroller of the Treasury it is inhibited from making the payment which it

finds to be due, and for which it has funds to pay, and it therefore recommends, and in that recommendation this Department concurs, that an appropriation of $260.02 be made to reimburse the owners of the schooner *Thomas W. H. White* for the damages inflicted by the light-house tender on that schooner.

Reimbursement of the Burlee Dry Dock Company, of Port Richmond, Staten Island, New York, for damage done to its dry dock by the tender Larkspur.—The following recommendation, made in the Board's last two annual reports, is renewed:

The light-house tender *Larkspur* damaged the dry dock of the Burlee Dry Dock Company by collision on April 2, 1903, while testing its main engines. The *Larkspur*, according to the light-house officers, surged ahead and drove into the dry dock while in charge of its regular ship officers and when no employee of the Burlee Dry Dock Company was present in the engine room. It appears that the facing piece of the dry dock was broken through in one place and otherwise damaged, and it is estimated it will cost $29.93 to reimburse the Burlee Dry Dock Company for repairing this damage. The Board recommends that an appropriation of this amount be made therefor.

Reimbursement to owners of schooner Bayard Barnes.—The following extract from the Board's last four annual reports is renewed:

On December 27, 1902, light-vessel No. 71, in spite of the best efforts of her officers and crew, drifted down upon the schooner *Bayard Barnes*, inflicting on her damages which were repaired by an expenditure of $12 on the part of the owners of that vessel. Under a decision of the Comptroller of the Treasury, volume 1, page 261, this amount is considered as an unliquidated damage and can not be paid by the Department. The Board therefore asks that the proper measures may be taken to have $12 appropriated for the reimbursement of the owners of that vessel for the damage caused by the collision between it and this light-vessel.

Reimbursement of the Warrington Wharf Company, of Warrington, Fla., for damage done to its wharf by the tender Laurel.—The following recommendation, made in the Board's last three annual reports, is renewed:

The light-house tender *Laurel*, while at Pensacola in June, 1902, and not being permitted by the naval authorities to use navy-yard docks, was obliged, in order to take on board provisions and supplies, to go alongside of the Warrington Wharf Company's wharf, and while there broke off one of the pilings, for which the company claimed the sum of $11.40. The Board recommends that an appropriation of this amount be made to satisfy this claim.

Reimbursement of a light-keeper for losses sustained during the gale of October, 1894.—The following recommendation, which was made in the Board's last seven annual reports, is renewed:

It appears that Mr. W. M. Quinn, while keeper of Cape San Blas, Florida, light-station during the gale of October, 1894, lost all the property he had at the light-station. An itemized account, amounting to $124.75, was transmitted through the inspector of the light-house district, who recommends that the keeper be indemnified in the sum claimed by him. The Board therefore recommends that an appropriation of $124.75 be made for this purpose.

Reimbursement of George L. Long, assistant keeper of Cape San Blas light-house, Florida, for losses sustained during the hurricane of October 8, 1894.—The following recommendation, made in the Board's last six annual reports, is renewed:

A statement of the losses sustained by this assistant keeper, to the amount of $75, approved and recommended by the inspector of the Seventh light-house district, was sent by the Secretary of the Treasury to the Speaker of the House of Representatives in his letter of April 20, 1900, with recommendation that reimbursement be made. The Board recommends that an appropriation of this amount be made therefor.

Reimbursement of light-keepers for losses sustained during the hurricane of October 1, 1893.—The following recommendation, which was made in the Board's last thirteen annual reports, is renewed:

Statements of these losses to the amount of $2,603.62, approved and recommended by the inspector of the Eighth light-house district, were sent by the Secretary of the Treasury to the Speaker of the House of Representatives in his letters of March 7 and April 3, 1894, with the recommendation that reimbursement be made. The Board recommends that an appropriation of this amount be made therefor.

Reimbursement of Light-Keeper Claiborne for personal losses sustained during the hurricane of September 8, 1900.—The following is a copy of a letter dated April 14, 1902, from the Secretary of the Treasury to the Speaker of the House of Representatives:

This Department has the honor to state, at the instance of the Light-House Board, that during the violent hurricane of September 8, 1900, when the city of Galveston was partially destroyed and many lives were lost, Mr. Harry C. Claiborne, keeper of the Bolivar Point (Texas) light-station, sustained serious losses of personal property, both from the depredation of the sea and from his humane efforts to provide for other sufferers who took refuge at the light-house.

Commander Selfridge, of the Navy, who was at that time the inspector of the Eighth light-house district, in reporting to the Light-House Board on this subject, states that "through his (Claiborne's) efforts the lives of 125 people were saved, and to my personal knowledge he harbored and fed a large number of them for a considerable period." In doing this the keeper exhausted the month's store of provisions for himself and family, which he had just purchased and which he used as far as he could in relieving the refugees, as required of him by the official instructions to the light-house keepers. He also furnished the sufferers with clothing and bedding until his own supply and that of his family were exhausted. The keeper at that time lost heavily of personal property belonging to himself and family, which, not being needed at the light-station for light-house purposes, is not included in his claim for reimbursement.

The Light-House Board, at its session of April 7, 1902, carefully considered a claim submitted by Light-Keeper Claiborne for reimbursement of those losses. The Board finds that the claim, in the sum of $234.48, is meritorious, and that the losses in question were of articles which the keeper had properly at the light-house. The Board is therefore of opinion that Keeper Claiborne ought to be reimbursed for the losses thus sustained.

The Department concurs with the Board in this matter, and therefore has the honor to recommend that an appropriation of $234.48 be made to satisfy this claim. The papers constituting the claim are herewith inclosed.

Reimbursement of the owners of the towboat Charles Chamberlain.—The following recommendation, made in the Board's last two annual reports, is renewed:

On March 22, 1905, the Heald Bank light-vessel, No. 81, in leaving the wharf at New Orleans, La., backed against a 5-inch manila hawser, which led from the wharf to the stern of the vessel, in order to throw the bow of the vessel out into the stream, when the stern line parted, and on account of the high river and swift current at the time the stern of the light-vessel collided with the bow of the *Chamberlain*, inflicting damages which will cost $35 to repair. The light-house inspector states that in his opinion the light-vessel was responsible for this damage. Under a decision of the Comptroller of the Treasury, volume 1, page 261, this amount is considered as an unliquidated damage and can not be paid by the Department. It appears from papers before the Board that it will cost $35 to repair the damage thus inflicted. The Board asks that an appropriation of that amount be made therefor.

Reimbursement of Assistant Light-Keeper Poitevin for losses sustained during the hurricane of September 27, 1906.—During the hurricane of September 27, 1906, the light-station, East Pascagoula River, Mississippi, was destroyed, and Mr. Gaston R. Poitevin, assistant keeper, sustained serious losses of personal property, as the

dwelling occupied by him was entirely swept away. These losses, amounting to $459.20, were examined and approved, and the Board recommends that an appropriation of that amount be made to reimburse him.

Reimbursement of the heirs of Light-Keeper Bowen for losses sustained during the hurricane of September 8, 1900.—The following is a copy of a letter dated December 7, 1901, from the Secretary of the Treasury to the Speaker of the House of Representatives:

This Department has the honor to state, at the instance of the Light-House Board, that during the hurricane of September 8, 1900, the light-station at Halfmoon Shoal, Texas, was demolished and that the light-keeper, C. K. Bowen, was drowned.

A claim of $450.50 having been presented by the temporary administrator of the estate of the late keeper at that light-station for the value of the property he had properly at the light-house, the loss of which was occasioned by this storm, the Board, at its session of November 4, 1901, examined into the merits of the claim and decided that the heirs of Mr. Bowen ought to be reimbursed for the losses thus sustained.

The Light-House Board therefore recommends that an appropriation of $450.50 be made to satisfy this claim. The Department, for the reasons stated, concurs with the Light-House Board in this recommendation, and incloses the papers constituting the claim.

The following is a copy of a letter dated March 17, 1906, from the Department of Commerce and Labor to the Committee on Claims, in reply to its letter inclosing a copy of H. R. bill No. 5717, "For the relief of the heirs of C. K. Bowen, deceased," on which suggestions were asked touching the bill and the propriety of its passage:

This Department has the honor to acknowledge the receipt of the committee's letter inclosing for consideration and report a copy of H. R. bill No. 5717, "For the relief of the heirs of C. K. Bowen, deceased," on which suggestions are asked touching the merits of the bill and the propriety of its passage.

In reply, this Department begs to state that the Light-House Board, to whom this matter was referred, reports that in its annual report for 1905, on page 107, it suggests the reimbursement of the heirs of this keeper, as follows:

"*Reimbursement of the heirs of Light-Keeper Bowen for losses sustained during the hurricane of September 8, 1900.*—The following is a copy of a letter dated December 7, 1901, from the Secretary of the Treasury to the Speaker of the House of Representatives:

"'This Department has the honor to state, at the instance of the Light-House Board, that during the hurricane of September 8, 1900, the light-station at Halfmoon Shoal, Texas, was demolished and that the light-keeper, C. K. Bowen, was drowned.

"'A claim of $450.50 having been presented by the temporary administrator of the estate of the late keeper at that light-station for the value of the property he had properly at the light-house, the loss of which was occasioned by this storm, the Board, at its session of November 4, 1901, examined into the merits of the claim and decided that the heirs of Mr. Bowen ought to be reimbursed for the losses thus sustained.'"

Reimbursement of the Territory of Hawaii for light-house expenditures.—The following is a copy of a letter, dated February 7, 1906, from the Department of Commerce and Labor to the House Committee on Claims:

Referring to your letter of February 2, 1906, inclosing, for the consideration of this Department, and for report thereon, a copy of H. R. 10103, "To refund to the Territory of Hawaii the amount [$23,393.69] expended in maintaining light-house service on its coasts from the time of the organization of the Territory until said light-house service was taken over by the Federal Government," I have the honor to inclose herewith a copy of a letter dated December 12, 1903, from the governor of Hawaii, inclosing a copy of a statement of the actual cost

of maintaining the Hawaiian light-house establishment for one month; and also a partial extract from a report of Hon. William H. Eustis, the special commissioner appointed to investigate post-office sites and other matters in the Hawaiian Islands, which reached the Light-House Board on January 26, 1903.

From the statement of the monthly expenses of the Hawaiian light-house establishment, it will appear that the average expenditure for one month was $501.90, and for the total time elapsing between the organization of the Territory of Hawaii on April 30, 1900, and the period when its light-house establishment was taken over by the United States Light-House Establishment, on January 1, 1904, a period of three years and eight months, the amount of money expended for this purpose is practically the same as stated in the bill. The appropriation made by the Territorial government for the support of its light-house establishment is stated in the report of Commissioner Eustis.

This Department, after carefully considering all its available data, finds no reason to doubt the statement made in the bill as to the amount expended, and therefore sees no reason to object to its passage.

[Copy of a portion of a report made by Hon. William H. Eustis, special commissioner appointed by the Secretary of the Treasury to investigate post-office sites and other matters in the Hawaiian Islands.]

LIGHT-HOUSES.

The light-houses on all the islands are still under the control of the Territorial government. There is a universal desire on the part of the governmental officials and citizens generally that these light-houses and buoys should be transferred to the jurisdiction of the Federal Government. It seems to me most fitting and proper that this should be done at an early day. The light-houses are generally of a very crude character, the one on the top of the custom-house in Honolulu being a lantern with a red cloth tied around it. I understand there is not a revolving light on the island coast. On the island of Hawaii there are but six lights, and they are all "fixed," so called, two small colored and four white ones, all very cheap and of short range.

The appropriation by the Territorial government for the light-houses at the present time is as follows:

Pay of light-house keepers	$9,459
Light-house expenses	3,000
Total	12,459

The lights used in the light-houses throughout the islands, except Diamond Head light, are ordinary oil lights, either double wicks or circular burners. Diamond Head light is a lens of the dioptric type of the third order, showing a fixed white light.

The keepers of the light-houses are generally paid from $25 to $30 a month. There is little difficulty, from an engineering standpoint, in the erection of light-houses, as all the sites along the shore are sufficiently elevated so that no tall structures are required.

EXECUTIVE CHAMBER, TERRITORY OF HAWAII,
Honolulu, December 22, 1903.

DEAR SIR: I beg to inclose a statement prepared by the superintendent of public works of the actual monthly light-house expenses and the monthly pay of light-house keepers. The former amount varies each month considerably, and to be on the safe side we have given the amounts actually expended during September last, as that month was the highest of any since last June. You will note it amounts to $83.40. We have been in the habit of purchasing the oil delivered at the light-house. In some cases it has had to be transported by pack mules.

The monthly pay of light-house keepers you will note amounts to $418.50.

Thus by an expenditure of not over $600 the lights can be maintained as they exist at present until such time as changes and improvements are desired.

Very sincerely yours,

G. R. CARTER, *Governor.*

Hon. GEORGE B. CORTELYOU,
Secretary Department of Commerce and Labor, Washington, D. C.

Actual monthly light-house expenses.

Kohala Sugar Company, 2 cases kerosene, at $3	$6.00	
Wilder's Steamship Company, freight on 1 box lamp burners	.25	
Hawaii Railway Company (Mahukona light), 2 cases kerosene oil and packing same to light-house	6.50	
Wilder's Steamship Company, oil supplied Maalaea, Kawaihae, and Laupahoehoe lights (1 case each), 3 cases, at $3	9.00	
Washington Light Company, 2 gallons alcohol, at $2.50, $5; 1 container, 50 cents; 2 dozen 1903 needles, $1.80, $3.60	9.10	
Pacific Hardware Company, repairing burner, 25 cents; 4 dozen blue lights, $30; 7 cases kerosene oil, $17.15; 2 C. L. brooms, 90 cents; matches (1 lot), 25 cents; 1 dozen chimneys, $4	52.55	
		$83.40
Pay of light-house keepers (monthly):		
W. F. Williams, Honolulu Harbor	100.00	
Kaukaliu, Diamond Head	75.00	
W. Hatton, Barbers Point	25.00	
J. R. Burrows, Kalaeokalaau	75.00	
J. Anderson, Makena	20.00	
H. Hoopii, Kohala Point	15.00	
Pepeekee Sugar Company, Makahanaloa	15.00	
Carl Blum, Nawiliwili	20.00	
Joseph N. Uahinui, Kaunakakai	8.00	
George H. Dunn, Lahaina	8.00	
C. L. Wight, Mahukona	12.50	
Wilder's Steamship Company, Maalaea, Kawainae, and Laupahoehoe, at $10 each	30.00	
		418.50
Total		501.90

The Board therefore recommends that an appropriation of $23,393.69 be made to reimburse Hawaii for expenditures incurred in maintaining her light-house establishment after she became a Territory of the United States.

Reimbursement of the owners of the steamer Clyde for damage done to it by the light-house tender Oleander.—The light-house tender *Oleander*, while on an inspection trip between Cairo, Ill., and Memphis, Tenn., at 7.30 a. m. on August 3, 1907, through the breaking down of her steering gear, became unmanageable abreast of Caruthersville, Mo., when she struck the steamer *Clyde*, damaging her to such extent that it cost $79.95 for repairs. The Board recommends that an appropriation of this amount be made to reimburse the owners of the steamer *Clyde*.

Reimbursement of the officers and crew of the light-house tender Manzanita for losses sustained on the foundering of that tender.—The following is a copy of a letter dated April 25, 1906, from the Department of Commerce and Labor to the Treasury Department:

This Department has the honor to submit herewith sworn statements of the value of the effects of the officers and the crew of the light-house tender *Manzanita*, lost by the foundering of that tender on October 6, 1905:

Patrick J. Byrne, master	$72.50
George Curtis, mate	73.50
Michael Nolan, second mate	223.70
Henry E. Wilson, engineer	91.00
George A. Snyder, assistant engineer	183.50
Mihkel Talp, carpenter	97.00
M. E. Lynch, steward	83.90
Tom Leong, cook	40.70
Chas. Soderberg, seaman	52.00
John Erickson, seaman	54.75

Wiktor Nylund, seaman	$47.75
Gunner Forsberg, fireman	108.80
Sigvart Olsen, quartermaster	69.60
John Matela, seaman	36.25
Alexander Wiebe, quartermaster	27.50
M. J. Burke, fireman	00.00
Lewis Williams, seaman	51.80
Emil Peterson, seaman	49.25
H. Lenhart, coal passer	28.30
George E. Brallier, coal passer	24.50
Walter Mattson, fireman	40.00
R. E. Kenney, coal passer	129.00
Mads Sorenson, mess attendant	17.25
Joseph Gunderson, mess attendant	40.00

This Department begs to ask that the proper measures may be taken to induce Congress to appropriate a sum sufficient, $1,642.55, to reimburse these men for the loss of their personal effects, all of which were properly on the light-house tender when she sank, as these people remained on board trying to save her until the last minute, the vessel going down while they took to their boats.

NEW WORKS AUTHORIZED.

The act approved on February 15, 1893, authorized the establishment of a number of light-stations, at an aggregate cost of nearly half a million dollars, but made no appropriation at that time for their construction. Since then from time to time appropriation has been made for the erection of many of them. The following is a list of the light-stations remaining for which no appropriation has yet been made, with the maximum amount which each may cost:

Bay State Shoal lights, New York	$800
Fairport Harbor fog-signal, Ohio	4,300
Lorain Harbor (Black River) fog-signal, Ohio	4,300
Sand Hills light-house, Michigan	20,000
Bayfield light and fog-signal, Wisconsin	5,000
Pats (or Hat) Point light and fog-signal, Minnesota	15,000
Little Gull Island light and fog-signal, Michigan	20,000
Wilson Harbor light, New York	2,500
Big Oyster Bed Shoal light and fog-signal, New Jersey	25,000
Deer Point light, Florida	1,000
New York Slough light and fog-signal, California	10,000
Willamette River, Oregon, 25 beacon lights and buoys between Salem and Portland	5,000

The act approved on June 6, 1900, authorized a contract for rebuilding Sand Island light and fog-signal station, Alabama, at a cost not to exceed $65,000, when such rebuilding is made necessary by the threatened destruction of the present station by encroachment of the sea, but no appropriation was made therefor. This contingency has not yet arisen.

The act approved on February 24, 1903, authorized the establishment of a light-house depot for the Second light-house district in Boston Harbor, Massachusetts, on land owned by the United States, at a cost not to exceed $25,000, but made no appropriation therefor. An appropriation of a proper amount is therefore needed.

The act approved on April 28, 1904, provided that if Albert F. Eells, of Boston, Mass., and his associates shall build a light-house and fog-signal at Diamond Shoal, North Carolina, under certain specified conditions, at their own cost, they shall be authorized and required to maintain the structure and operate the light in

accordance with the regulations of the Light-House Board for one year at their own cost, after which it shall be placed under the control of the Light-House Board, who shall operate it for four years more at the cost of the United States, when Eells and his associates shall be authorized to demand from the United States the sum of $590,000, provided that if the structure shall not be in a substantial and satisfactory condition Eells and his associates shall not be so authorized, and provided further that if the light-house shall not be accepted it shall not be used by the United States.

The act approved on March 3, 1905, modified the act approved on April 28, 1904, increasing the amount to be paid the said Eells and his associates to $750,000 on certain specified conditions.

On January 17, 1907, request was made that the site of the light-house be designated.

The act of March 3, 1905, provided that—

> Unless said plans are approved by said Secretary prior to January first, nineteen hundred and six, and the construction of the proposed structure be in good faith commenced within six months after such approval, the authority granted by this act shall cease.

The period of six months mentioned in this act having expired on June 29, 1906, the matter was referred by the Department of Commerce and Labor to the Attorney-General for an opinion upon the question whether, under the circumstances, there has been a "commencement in good faith of the construction of the proposed structure within six months after the approval of the plant, within the meaning of the act." This reference was accompanied by a statement of the quantity of work accomplished up to January 17, 1907.

On August 16, 1907, the Attorney-General rendered his opinion, in which it was stated that—

> Here, I think, there was no commencement of construction in good faith or otherwise, but only some preparation therefor. * * * I accordingly answer your question in the negative.

On August 19, 1907, the Department of Commerce and Labor wrote to Captain Eells's attorney in fact that—

> As construction of the proposed light-house and fog-signal was not in good faith commenced within six months after the approval of plans therefor, the authority granted by the act, by the express terms thereof, has ceased, and that the Department must therefore decline to further recognize the existence of such authority.

The act approved on April 28, 1904, appropriated $60,000 for a light and fog-signal on Black Ledge, Long Island Sound, near New London, Conn.

The act approved on June 20, 1906, authorized the Board to place the light and fog-signal on Southwest Ledge instead of on Black Ledge, and made this $60,000 available therefor.

The act approved on March 4, 1907, authorized the Board to contract for completing Southwest Ledge light-station at a total cost not exceeding $115,000, including the $60,000 above referred to. This the Board has done, and it now recommends that an additional appropriation of $55,000 be made to satisfy this contract.

The act approved on June 20, 1906, authorized the establishment of a light-station at Hinchinbrook, Alaska, at a cost not to exceed $125,000. The act approved on June 30, 1906, appropriated $25,000

to begin the work. The act approved on March 4, 1907, appropriated $50,000 to continue the work. It needs that $50,000 more be provided to finish the work as authorized, and the Board has recommended that this amount be appropriated therefor.

SUPPLIES.

The Board estimates that, owing to the urgent needs of the Light-House Establishment, $800,000 will be needed to provide supplies for the Light-House Service during the coming year. The Board therefore recommends that an appropriation of that amount be made therefor.

REPAIRS OF LIGHT-HOUSES.

The following statement, made in the Board's last four annual reports, is renewed:

As stated last year, a large annual expenditure for repairs will be needed until the older light-house stations have been brought up to the standard of modern requirements. Restoration, repair, and improvement of light-house towers and structures and of illuminating apparatus, the substitution of new for old types of lamps, and of improved methods of rotation for the old devices in the case of flashing lights are required as the old wear out or become inefficient under changed conditions. At many of the older stations the light-house structures and the auxiliary buildings for the occupation and use of the keepers are not only dilapidated, but out of date, and practically require reconstruction. It was the early practice of the Light-House Board to provide for the family of the principal keeper and encourage employment of assistant keepers without families. This pracice is no longer considered advisable, since keepers are best obtained by promotion of assistant keepers, and the latter should be encouraged to remain long in the service in order to qualify themselves for the position of keeper. At some stations where a single keeper was originally sufficient and was alone provided for, assistants have been made necessary by increase of duties due to the introduction of fog-signals or other improvements in the station. In such cases there is crowding and discomfort for the families of the employees and a lack of the privacy and comforts of domestic life which must be provided for a desirable class of employees.

It is proposed to effect the necessary improvements in the older stations progressively by a moderate annual expenditure.

The Board estimates that $1,000,000 will be required for these purposes in the United States during the fiscal year to end June 30, 1909, and it is recommended that an appropriation of that amount be made therefor.

SALARIES OF LIGHT-KEEPERS.

The general appropriation, the title of which is "Salaries of keepers of light-houses," is not for salaries only, but is also for "fuel, rations, rent, and quarters, and all other necessary incidental expenses," such as transportation of keepers, etc., connected with the payment and maintenance of keepers of light-houses. Since the establishment of light-houses in Alaska the expenditures for fuel and rations and transportation of keepers have become much larger than heretofore. It is expected that a number of light-stations, for the building of which appropriations have been made, will be ready for use, each at a different time during the coming year.

There were on July 1, 1907, on duty 1,585 light-keepers. It is quite possible that by June 30, 1908, many more light-keepers, etc., will be needed, as many aids to navigation have been appropriated

for and more are likely to be at the next two sessions of Congress. The Board therefore recommends that the number of light-keepers authorized be increased from 1,650 to 1,750 in the appropriation for salaries of light-keepers.

The 1,585 keepers now employed receive an average pay of about $46 a month. This is insufficient compensation for good light-keepers. The Board recommends that an appropriation of $1,100,000 be made for their payment next year. The Board is of opinion that the pay of light-keepers should be increased by an average of 10 per cent, and this can be done if the appropriation here recommended is made.

It is provided, in effect, in section 4673 of the Revised Statutes, that the salaries of light-keepers shall not exceed an average of $600 a year each. The Board again recommends that this average be increased to $700 each.

EXPENSES OF LIGHT-VESSELS.

Congress appropriated for the last fiscal year for the expenses of light-vessels $625,000.

There are now 49 light-vessels in position and 11 others are held as relief light-vessels.

The cost of maintaining a modern light-vessel, such as those off Cape Hatteras, Nantucket, Cape Lookout, etc., is about $15,000 a year. The cost of repairs, etc., on the older vessels increases yearly, as the cost of labor and material has recently increased. Appropriations were made at the last session of Congress for building four light-vessels and for completing six others. Appropriations are recommended in the proper place of this annual report for building four more light-vessels.

The Board estimates that the expenses of light-vessels will amount to $1,000,000 in the coming fiscal year, and it recommends that an appropriation of that amount be made therefor.

EXPENSE OF BUOYAGE.

Last year the Board asked for $700,000 for expenses of buoyage, and that amount was appropriated. There were on July 1, 1906, about 5,762 buoys of all kinds in position. The demand for additional and better buoys constantly increases. The bell buoys cost about $345 each. The whistling buoys cost from $412.50 to $640 each. The Pintsch gas buoys cost from $1,625 to $1,800 each. The supply of buoys and appurtenances at the general light-house depot and at the various district light-house depots has run down so that requisitions have in many cases been reduced. The stock should be largely increased. A new buoy lighted by acetylene gas has been recently tried. It is much more efficient than any in previous use and costs more in proportion. The Light-House Establishment has made practical tests of it and is inclined to use it if funds are provided. These buoys will cost from $3,300 to $15,000 each at present, but the cost may be reduced later. Constant calls for additional and better buoys are made by marine interests. Although $700,000 were provided last year, the Board is now hampered for funds and has had to refuse

to establish many buoys which were urgently requested and which the Board thinks, after examination, are actually needed.

The Board estimates that $1,200,000 will be needed for expenses of buoyage for the next fiscal year, and it recommends that an appropriation of that amount be made therefor.

FOG-SIGNALS.

The Board repeats the statement made in former annual reports that the limited appropriation made for this purpose was insufficient to permit all needed renovation and improvements in this important class of aids to navigation.

Improved apparatus has been installed at several stations, preserving the system of interchangeability between the various members of the duplicate sets of apparatus required in each case. The Board believes that the change from the old-style steam engine, which consumes much steam, to the automatic apparatus, which operates by clockwork and consumes steam only for winding the clock and opening the valve, is desirable, and should be made at least as rapidly as the old engines become unserviceable; that the replacing of steam boilers by some form of explosive engine with an air compressor is needed for all stations where the water supply is precarious, and may perhaps be found advantageous in all cases when the steam boilers now in use are worn out, and that, in view of the probability that steam will be replaced by compressed air generally for fog-signals, it is not well to enter at once upon any considerable expenditure for perfecting steam boilers now in use.

The installation of oil-burning engines and air compressors in place of the old-style coal-burning engines to produce steam to be used in whistles and sirens is progressing as fast as the latter become unfit for further service.

The act approved on March 3, 1905, under the head of expenses of fog-signals, provides for the establishment of submarine signals. It will be necessary to increase this yearly appropriation if much is done in this direction, as the amount heretofore appropriated has been found insufficient for the proper maintenance of the fog-signal service.

It is therefore estimated that $300,000 will be required during the coming year for all expenses connected with fog-signals, and it is recommended that an appropriation of that amount be made therefor.

During the fiscal year the Board purchased 10 submarine fog-signals for which it paid $1,000 each and which had been installed experimentally by the Submarine Fog-Signal Company at its own expense.

The Board also purchased 9 other fog-signals at $1,000 each and paid in addition the cost of emplacing each, at rates running from $117 to $430 each, according to the distance from the works of the company.

LIGHTING OF RIVERS.

The appropriation of $375,000 for the last year enabled the Board to maintain existing lights, and to add from time to time a few additional ones at points where there arose the most urgent demand for

them. But at many other points where lights are needed it was impracticable to establish them because of the lack of funds.

The appropriation for lighting of rivers made in the act approved on June 30, 1906, authorized the establishment of post lights in Hawaiian and Alaskan waters. But the appropriation was increased over that of last year by only $25,000.

The demand for post lights, as these small, economical, quickly erected lights are called, comes to the Board, not only from those waters named in the appropriation for lighting rivers, but from other waters where such lights would meet the demands of commerce.

The act approved on March 4, 1907, appropriated $500 for maintaining during that year "post lights on Fox River, Lake Winnebago, and connecting lakes and channels." The Board therefore recommends that "Fox River, Lake Winnebago, and connecting lakes and channels" be inserted in their proper place in the appropriation for lighting rivers, that their maintenance hereafter may be duly authorized.

Request has been made that the Atchafalaya River, Louisiana, be lighted. The Board recommends that the words "Atchafalaya River, Louisiana," be inserted in the proper place in the appropriation for lighting rivers.

Request has also been made that certain inexpensive post lights be established on the Potomac River in addition to the light-houses already in operation. The Board, concurring in these requests, recommends that the words "Potomac River" be inserted in the proper place in the appropriation for lighting rivers.

The Board estimates that $450,000 will be needed for lighting rivers next year, and it recommends that an appropriation of that amount be made therefor.

NEW LIGHT-VESSELS.

The following is a list of light-vessels for which appropriations have been made, and which are now under construction:

Ambrose Channel, New York, light-vessel No. 87, to complete	$65,000
Brunswick Bar, Georgia, light-vessel No. 84, to complete	50,000
Buzzards Bay (Hen and Chickens), Massachusetts, light-vessel No. 86, to complete	65,000
Columbia River, Oregon, light-vessel No. 88, to complete	80,000
Hedge Fence Shoal, Massachusetts, light-vessel No. 90, in full	115,000
Martins Reef, Michigan, light-vessel No. 89, to complete	20,000
Nantucket Shoals, Massachusetts, light-vessel No. 85, to complete	65,000
Relief light-vessel, No. 92, for use on Pacific coast, in full	130,000
Relief light-vessel, No. 91, for the Fourth light-house district, in full	115,000
Swiftsure Bank light-vessel, No. 93, Washington (off entrance to Juan de Fuca Strait), in full	130,000

The Board made plans and specifications for light-vessel No. 82 to be used as a relief light-vessel on the Great Lakes in the Ninth and Eleventh light-house districts, for which an appropriation of $30,000 was made by the act approved on March 3, 1903, and has three times asked bids for its construction, and each time the bids received have been rejected, as they were for a greater amount than the funds available.

The Board estimates that it will now cost $50,000 to build a suitable vessel for this purpose, and it has recommended in the proper place that an additional appropriation of $20,000 be made for this purpose.

The following is a list of light-vessels for which appropriations are asked in this annual report and in the Board's estimates for the coming year:

Cape Henry, Virginia, light-vessel	$115,000
Orford Reef, Oregon, light-vessel	130,000
North Manitou, Lake Michigan, Michigan, light-vessel	50,000
Relief light-vessel for the Ninth and Eleventh light-house districts, in addition to $30,000 already appropriated	20,000

LIGHT-VESSELS IN COMMISSION JULY 1, 1907.

No.	Station.	Material of hull.	When built.	Gross tons.	Dimensions. Length.	Beam.	Depth.	I. H. P.	Fog-signal.	Illuminant.
					Feet.	Feet.	Feet.			
1	Frying-Pan Shoals, N.C	Wood.	1855	275	103.0	24.0	12.0	....	12-in. steam whistle	Oil.
2	Hen and Chickens, Buzzards Bay, Mass.	...do..	1849	120	98.0	25.0	10.5	....	Bell	Oil.
3	Shovelful Shoal, Mass..	...do..	1852	140	69.4	23.3	8.1	....	.....do	Oil.
4	Handkerchief, Nantucket Sound, Mass.	...do..	1855	104	77.0	19.5	9.6	....	.....do	Oil.
5	Cross Rip, Nantucket Sound, Mass.	...do..	1864	104	81.5	21.5	11.0	....	.....do	Oil.
6	Succonnesset Shoal, Nantucket Sound, Mass.	...do..	.....	120	80.0	24.0	10.7	....	.....do	Oil.
7	Relief, Third district...	...do..	1854	142	98.5	22.5	10.8	....	.....do	Oil.
9	Relief, Second district.	...do..	1857	104	81.2	22.2	11.5	....	.....do	Oil.
11	Scotland, N.Y. and N.J.	...do..	1853	320	104.0	24.7	13.0	....	.....do	Oil.
13	Bartlett Reef, Conn....	...do..	1854	155	79.7	21.7	9.9	....	.....do	Oil.
16	Relief, Third district...	...do..	1854	280	103.5	22.5	10.4	....	10-in. comp. air whistle.	Oil.
20	.....do.....	...do..	1867	105	81.5	21.5	16.5	....	Bell	Oil.
23	Ram Island Reef, N.Y.	...do..	1857	186	94.2	24.2	9.2	....	.....do	Oil.
29	Relief, Sixth district...	...do..	1864	150	98.0	23.5	11.3	....	.....do	Oil.
34	Charleston, S. C.....	...do..	1864	150	95.0	23.0	9.8	....	.....do	Oil.
39	Brenton Reef, R. I.....	...do..	1875	387	114.3	26.8	15.8	....	12-in. steam whistle	Oil.
41	Vineyard Sound (Sow and Pigs), Mass.	...do..	1876	387	114.0	26.8	12.4	....	.....do	Oil.
42	Great Round Shoal, Nantucket, Mass.	...do..	1877	410	114.0	26.5	12.5	....	12-in. comp. air whistle.	Oil.
43	South Pass, La.....	Comp.	1881	187	110.8	25.0	11.5	....	12-in. steam whistle	Oil.
44	Northeast End, N.J....	Iron..	1882	304	111.5	25.0	11.5	....	.....do	Oil.
45	Winter-Quarter Shoal, Va.	(a)	1887	336	120.8	27.5	11.5	....	12-in. comp. air whistle.	Oil.
46	Tail of the Horseshoe, Chesapeake Bay, Va.	(a)	1887	337	119.0	27.0	13.0	....	12-in. steam whistle	Oil.
47	Pollock Rip, Cape Cod, Mass.	Comp.	1891	296	112.0	26.8	12.7	....	.....do	Oil.
48	Cornfield Point, Conn..	...do..	1891	296	112.0	26.8	12.7	....	.....do	Oil.
49	Cape Charles, Chesapeake Bay, Va.	...do..	1891	296	112.0	26.8	12.7	....	.....do	Oil.
50	Columbia River, Oreg..	...do..	1892	296	112.0	26.6	12.7	....	.....do	Oil.
51	Sandy Hook, N.J	Steel..	1892	283	110.0	26.5	14.5	135	.....do	Elec.
52	Fenwick Island Shoal, Del.	...do..	1892	283	110.0	26.5	14.5	135	.....do	Oil.
53	Martins Industry, S. C..	...do..	1892	283	110.0	26.5	14.5	135	.....do	Oil.
54	Boston, Mass.....	...do..	1892	283	110.0	26.5	14.5	135	.....do	Oil.
55	Lansing Shoal, Lake Michigan, Mich.	Wood.	1891	130	90.0	20.0	14.0	100	6-in. steam whistle	Oil.
56	White Shoal, Lake Michigan, Mich.	...do..	1891	130	90.0	20.0	14.0	100	.....do	Oil.
57	Grays Reef, Lake Michigan, Mich.	...do..	1891	130	90.0	20.0	14.0	100	.....do	Oil.
59	Bar Point Shoal, Mich.	...do..	1893	105	80.0	21.5	9.4	....	.....do	Oil.
60	Eleven-Foot Shoal, Mich.	...do..	1893	105	80.0	21.5	9.4	....	.....do	Oil.
61	Lake Huron, Mich., head of St. Clair River.	...do..	1893	105	80.0	21.5	9.4	....	.....do	Oil.
62	Poe Reef, Straits Mackinac, Mich.	...do..	1893	105	80.0	21.5	9.4	....	.....do	Oil.
63	Relief, Tenth district..	...do..	1893	17	40.0	13.6	3.7	....	Bell	Oil.
64	Limekiln Crossing South, Detroit River, Mich.	...do..	1893	17	38.0	12.1	3.9	....	.....do	Oil.
65	Limekiln Crossing North, Detroit River, Mich.	...do..	1893	17	38.0	12.0	3.5	....	.....do	Oil.

a Steel, wood sheathed.

LIGHT-VESSELS IN COMMISSION JULY 1, 1907—Continued.

No.	Station.	Material of hull.	When built.	Gross tons.	Dimensions.			I. H. P.	Fog-signal.	Illuminant.
					Length.	Beam.	Depth.			
					Feet.	*Feet.*	*Feet.*			
66	Nantucket Shoals, Mass.	Comp.	1896	380	112.0	28.5	13.0	350	12 in. steam whistle	Elec.
67	Umatilla Reef, Wash.	Steel.	1897	380	112.0	28.5	13.0	350	do	Oil.
68	Fire Island, N. Y.	Comp.	1897	408	112.0	28.5	13.0	350	do	Elec.
69	Overfalls, Del.	do	1897	408	112.0	28.5	13.0	350	do	Elec.
70	San Francisco, Cal.	do	1897	400	112.0	28.5	13.0	350	do	Elec.
71	Diamond Shoal, Cape Hatteras, N. C.	do	1898	408	112.0	28.5	13.0	350	do	Elec.
72	do	Steel.	1900	450	112.0	28.5	14.9	350	do	Elec.
73	Pollock Rip Shoals, Nantucket Sound, Mass.	do	1901	450	112.0	28.5	14.9	400	do	Oil.
74	Cape Elizabeth, Me.	Wood.	1902	368	118.0	28.5	14.6	400	do	Oil.
75	Grossepoint, Lake St. Clair, Mich.	Steel.	1902	160	71.3	24.0	10.0	....	Bell	Oil.
76	Relief, Twelfth and Thirteenth districts.	do	1904	283	117.6	28.7	14.9	400	12 in. steam whistle	Oil.
77	Peshtigo Reef, Green Bay, Wis.	do	1906	102	65.0	21.5	9.7	....	Bell	Oil.
78	Relief, Third district	do	1905	321	112.9	28.5	15.3	380	12 in. steam whistle	Oil.
79	Five-Fathom Bank, N. J.	do	1905	321	112.9	28.5	15.3	380	do	Oil.
80	Cape Lookout Shoals, N. C.	do	1905	321	112.9	28.5	15.3	380	do	Oil.
81	Heald Bank, Gulf of Mexico, Tex.	do	1905	321	112.9	28.5	15.3	380	do	Oil.
83	Blunts Reef, off Cape Mendocino, Cal.	do	1905	321	112.9	28.5	15.3	380	do	Oil.
	Bush Bluff, Elizabeth River, Va.	Comp.	1876	87	60.0	19.5	12.0	....	Bell	Oil.
	Southeast Shoal, Point au Pelee Passage, Lake Erie, Canada.	Maintained during the summer by contract with the Lake Carriers' Association.							Steam whistle	Oil.

NEW TENDERS.

The following is a list of light-house tenders now being built under contract which requires that they shall be delivered within the year:

The *Tulip*, for the inspector of the Third light-house district.
The *Orchid*, for use in Porto Rican waters.
The *Cypress*, for the use of the inspector of the Sixth light-house district.
The *Hibiscus*, for the use of the inspector of the Seventh light-house district.
The *Anemone*, for the use of the inspector of the Eleventh light-house district.
The *Sequoia*, for the use of the engineer of the Twelfth light-house district.
The *Kukui*, for use in Hawaiian and Pacific waters.
The *Manzanita*, for the use of the inspector of the Thirteenth light-house district.

Plans for the following-named tenders are now in hand:

The *Woodbine*, for use of the inspector of the Third light-house district in New York Bay and Harbor and in Lake Champlain.
The *Camelia*, for the use of the inspector of the Eighth light-house district in shoal and inland waters.
The *Dandelion*, for the use of the inspector of the Fifteenth light-house district on the rivers in that district.

Appropriations are recommended in this annual report and in the accompanying estimates for building the following-named new tenders:

Tender for the use of the engineer of the First and Second light-house districts $200,000
Tender for the use of the inspector of the First light-house district 200,000

Pansy.—This tender was built in 1878. The hull is of iron (not steel) and is in good condition. The boilers are beyond repair. She was on duty for some time in Porto Rican waters, from where she was recently towed. Although built some thirty years ago at a cost of about $44,000, it is probable that she could not now be duplicated for less than $120,000. This light-draft tender is much needed for use in the shallow waters of the general service. By the expenditure of about $50,000 she can be made efficient and usable for many years. The Board recommends that an appropriation of that amount be made therefor.

LIGHT-HOUSE TENDERS IN COMMISSION JULY 1, 1907.

Name.	District.	For—	Gross tonnage.	When built.	Description of vessel.	Material of hull.	Dimensions. Length.	Beam.	Depth.	I. H. P.
							Feet.	*Feet.*	*Feet.*	
Amaranth	11	Engineer	743	1892	Single-screw steamer	Steel	150.7	28.0	14.0	600
Arbutus	7 and 8	do	400	1879	Twin-screw steamer	Wood	144.5	25.0	10.7	320
Armeria		Supply (Atlantic and Gulf).	1,052	1890	do	Steel	201.7	34.7	17.6	1,400
Aspen	11	Inspector	276	1906	Single-screw steamer	do	117.7	25.0	11.8	440
Azalea	2	do	423	1891	do	do	154.0	25.0	12.3	400
Cactus	3	do	200	1863	Side-wheel steamer	Wood	140.7	21.5	8.3	160
Columbine	13	Engineer	434	1892	Single-screw steamer	Steel	145.0	26.5	15.2	800
Crocus	10	Inspector	626	1904	Twin-screw steamer	do	154.5	29.0	13.5	720
Dahlia	9	do	426	1874	Single-screw steamer	Iron	141.5	25.0	10.5	255
Daisy	3	do	35	1892	Single-screw launch	Wood	74.0	14.0	5.7	80
Gardenia	3	do	150	1879	Single-screw steamer	do	117.0	20.2	9.3	130
Geranium	1	do	356	1863	Side-wheel steamer	do	155.5	23.0	10.5	300
Goldenrod	14	do	144	1888	Stern-wheel steamer	Steel	150.0	26.5	3.7	152
Heather	13	do	700	1903	Single-screw steamer	do	165.0	28.5	14.9	750
Holly	5	do	367	1881	Side-wheel steamer	Iron, shd.	166.7	24.2	9.7	400
Hyacinth	9	Engineer	718	1902	Single-screw steamer	Steel	150.7	28.0	14.0	878.3
Iris	3	do	428	1897	do	do	142.0	30.0	10.3	800
Ivy	7 and 8	do	550	1904	Twin-screw steamer	do	165.0	30.3	13.1	720
Jessamine	5	do	257	1881	Side-wheel steamer	Iron	146.3	23.7	9.5	296
John Rodgers	3	Inspector	260	1883	do	do	151.0	27.0	8.7	260
Juniper	5	do	104	1903	Twin-screw steamer	Steel	90.0	18.0	8.1	300
Larkspur	3	do	685	1903	do	do	162.0	30.0	14.1	750
Laurel	7	do	312	1876	do	Wood	134.0	25.0	10.0	250
Lilac	1	do	434	1892	Single-screw steamer	Steel	145.0	26.5	15.2	800
Lily	15	do	507	1875	Side-wheel steamer	Wood	178.0	28.0	4.0	307
Madroño	12	do	411	1885	Single-screw steamer	Iron	163.7	27.5	14.7	700
Magnolia	8	do	550	1904	Twin-screw steamer	Steel	165.0	30.3	13.1	720
Maple	5	do	392	1893	do	do	155.0	30.0	11.8	650
Mangrove	7	do	572	1897	do	do	155.0	30.0	11.8	650
Marigold	11	do	454	1891	Single-screw steamer	Iron	150.0	27.0	12.3	550
Mayflower	2	do	572	1897	Twin-screw steamer	Steel	155.0	30.0	11.8	650
Mistletoe	3	Engineer	352	1872	Side-wheel steamer	Wood	153.0	26.0	9.0	370
Myrtle	1 and 2	do	348	1872	Single-screw steamer	do	140.0	25.7	11.3	225
Nettle	3	do	22	1878	Single-screw launch	do	58.0	9.9	4.0	37
Oleander	16	Inspector	344	1903	Stern-wheel steamer	Steel	165.0	34.0	7.0	600
Pansy	3	do	314	1878	Twin-screw steamer	Iron	144.0	25.0	10.5	254
Pharos	6	Engineer	168	1860	Sailing schooner	Wood	96.0	24.0	7.5	.....
Snowdrop	6	do	32	1896	Twin-screw naphtha launch.	do	61.0	10.5	5.0	24
Sumac	9	Inspector	675	1903	Twin-screw steamer	Steel	160.0	30.0	14.1	700
Sunflower	4	do	800	1907	do	do	173.6	31.0	15.5	900
Thistle	5	Engineer	32	1890	Single-screw tug	Wood	50.0	15.3	7.0	45
Verbena	2	Inspector	295	1870	Side-wheel steamer	do	135.0	25.4	9.0	300
Violet	5	do	231	1864	do	do	143.0	23.0	8.8	300
Warrington	10	Engineer	410	1868	Single-screw steamer	do	152.0	25.0	10.3	400
Water Lily	6	Inspector	33	1895	Twin-screw naphtha launch.	do	61.1	10.5	5.0	24
Wistaria	6	do	450	1882	Side-wheel steamer	Iron	167.5	25.0	10.0	250
Zizania	4	do	417	1888	Twin-screw steamer	Steel	150.0	27.0	12.0	327

LIGHT-KEEPERS' DWELLINGS.

The act approved on February 26, 1907, in section 3, authorized the establishment of 30 light-keepers' dwellings, at a cost not to exceed $6,500 each.

The act approved on March 4, 1907, appropriated $75,000 for building light-keepers' dwellings.

The 30 light-keepers' dwellings, at $6,500 each, will require an appropriation of $195,000. This, minus the $75,000 already appropriated, requires a further appropriation of $120,000 to enable the Board to establish the 30 light-keepers' dwellings authorized in the above-named act.

The Board has taken measures to establish a number of light-house keepers' dwellings at a total cost of about $75,000, the amount of the appropriation made. The Board therefore recommends that an additional appropriation of $120,000 be made to enable it to establish the authorized additional light-keepers' dwellings.

PORTO RICAN LIGHT-HOUSE SERVICE.

The last appropriation of $75,000, made by the act approved on March 3, 1905, for maintaining this service, will soon be exhausted. The new tender, which will be ready for service in July, 1908, will cost about $36,000 a year to maintain. The cost of maintaining the Porto Rican light-house service has increased as the lights and buoys have increased in number. The Board estimates that it will cost in all about $100,000 to maintain the Porto Rican light-house service for the next fiscal year, and recommends that an appropriation of that amount be made therefor.

HAWAIIAN LIGHT-HOUSE ESTABLISHMENT.

The act approved on March 4, 1907, appropriated $60,000 for the establishment of a light and fog-signal on the north shore of Molokai Island, Hawaii, and $215,000 for a steam tender for the Light-House Service in Hawaiian and Pacific waters. The authority was also given by the act approved on June 30, 1906, for the establishment of post lights in Hawaiian waters to be paid for from the general appropriation for lighting rivers. By the same act authority is given for the establishment of private lights after January 1, 1907, under the control and direction of the Light-House Board in accordance with rules and regulations established by the Secretary of Commerce and Labor.

The Board has recommended, under appropriate heading in this report, the appropriation of $75,000 for the establishment of a first-order light at or near Kilauea Point, Kauai Island. The Board has also recommended the appropriation of $40,000 for the establishment of a light-house depot at Honolulu, Hawaii, and the opinion of the Board being asked, it has again recommended the passage of a bill providing for an appropriation of $23,393.69 for reimbursing the Hawaiian government for moneys expended in maintaining its light-house establishment from the time it became an American Territory until its light-house establishment was taken over and maintained by the Light-House Board.

The buoyage of Hawaiian waters can be amplified with great benefit to American shipping. Certain day beacons have been or are being built which will highly benefit Hawaiian navigation.

RECENT ADDITIONS TO THE LIGHT-HOUSE ESTABLISHMENT.

The Board, as directed by the President through the Department of Commerce and Labor, took charge of the aids to navigation in the waters of the island of Guam, the Midway Islands, and the American Samoan Islands. The action taken by the Board in each case is related in its proper place in this report.

THE COAST LINE OF THE UNITED STATES, IN NAUTICAL MILES.

Atlantic coast	1,773
Gulf coast	1,607
Porto Rico	269
Pacific coast	1,571
Alaska	4,123
Hawaiian Islands	628
Guam Island	80
Midway Islands	20
Samoan Islands	83
Northern lakes and rivers	3,041
Western rivers	4,344
Total, United States and dependencies	17,539

NEW LIGHT-HOUSE DISTRICTS.

The following is a copy of a letter dated March 4, 1902, from the Secretary of the Treasury to the Speaker of the House of Representatives:

This Department has the honor to ask, at the instance of the Light-House Board, that proper measures may be taken as soon as practicable to have so much of the act approved July 26, 1886 (24 Stat. L., 148), as stands thus:

"The Light-House Board shall arrange the ocean, gulf, lake, and river coasts of the United States into light-house districts, not exceeding sixteen in number," amended so that it will stand as follows:

"The Light-House Board shall arrange the ocean, gulf, lake, and river coasts of the United States into light-house districts, not exceeding eighteen in number."

Under the provisions of this amendment this Department proposes to create another light-house district, which shall embrace the Porto Rican light-house service. * * * The Porto Rican light-house service was on May 1, 1900, turned over to the United States Light-House Establishment by Executive order of the President. The Light-House Board thereupon temporarily attached the Porto Rican light-house establishment to the Third district of the United States Light-House Establishment.

This arrangement is cumbrous and inconvenient. It causes delay in the transmission of official correspondence and in handling of light-house affairs which will require promptitude, and is detrimental to an efficient administration of the Porto Rican light-house service. * * *

Under the amendment submitted, it is also proposed to create still another light-house district to comprise Alaskan waters. The administration of the light-house service in Alaska is now a part of the work assigned to the Thirteenth light-house district. But the great distance between Alaskan aids to navigation and the offices of the light-house inspector and engineer at Portland, Oreg., renders it impossible to maintain the Alaskan aids to navigation with the reliability which the service demands. The need of a new light-house district embracing Alaska has been evident for some time. The following statement made in the Board's annual report for 1900 is repeated on page 37 in its report for 1901:

"In view of the great extent of navigable waters in Alaska and of the increased traffic in this region, particularly between Puget Sound points and those along Lynn Canal, it seems so desirable that the present Thirteenth dis-

trict should be divided, making two districts of it, that special recommendation will be made to Congress at its next session to that end, the new district to include Alaskan waters only, with headquarters at Sitka."

Until this new district is organized it will be impossible to maintain in Alaskan waters those aids to navigation which require frequent attention, such as gas buoys, for the establishment of which many requests have been received.

The Light-House Board, at its session on March 3, 1902, urged this Department to take the proper measures, as soon as practicable, to provide for the establishment of two additional light-house districts.

This Department therefore invites the attention of the Congress and suggests immediate action, especially as what is asked can be done without increase of the appropriations for the maintenance of the United States Light-House Establishment.

The care of the aids to navigation in the Hawaiian waters, and the waters about the Midway Islands, waters about the island of Guam, and the waters about the Samoan Islands belonging to this country were devolved on the Light-House Board, and they have been placed under the charge of the inspector and engineer of the Twelfth light-house district, whose headquarters are at San Francisco, Cal.

These islands are thousands of miles from San Francisco and hundreds of miles from each other. The time necessary for communication from these points with the light-house inspector and engineer at San Francisco runs from weeks into months. The impracticability of properly handling aids to navigation from headquarters separated by such distances and such time from them is self-evident. The Board therefore again recommends that proper legislative measures be taken to provide for the establishment of another light-house district, to be comprised of these Pacific islands, and that 19 instead of 18 light-house districts be authorized.

FREE ENTRY ASKED FOR GOODS IMPORTED FOR LIGHT-HOUSE PURPOSES.

The following is a copy of a letter, dated January 30, 1902, from the Secretary of the Treasury to the Speaker of the House of Representatives:

It is provided in the tariff act of 1890, paragraph 122, that duties shall be collected on * * * "Lenses of glass or pebble wholly or partially manufactured and not especially provided for in this act * * * 45 per centum ad valorem."

By the act of March 3, 1893 (27 Stat. L., 575), sundry civil appropriations, under the heading of "Supplies of light-houses," it is provided:

"That lenses and lens glass for the use of the Light-House Establishment may be imported free of duty."

Under that provision light-house illuminating apparatus known as lenses and lens glass for the use of the Light-House Establishment were until quite lately imported free of duty.

On June 21, 1901, the Comptroller of the Treasury, in a letter to Lieut. Col. D. P. Heap, U. S. Army, then engineer of the Third light-house district, a copy of which is inclosed, decided that the paragraph above quoted from the act of March 3, 1893, was "limited in its application to the particular fiscal year for which the appropriation is made, merely because the provision is in the form of a proviso."

Lenses and lens glass for the use of the Light-House Establishment had been imported free of duty from the time of the passage of the act containing that proviso—namely, March 3, 1893—up to June 21, 1901, without any objection by any accounting officer. Still the Comptroller held "* * * that the word 'hereafter' when used in the proviso in such an act indicates an intention to extend the application of the proviso to future appropriations. The absence of this word or other words indicating futurity from this proviso is to be observed. * * * I am therefore of the opinion that neither the language nor the nature of this proviso indicated an intention to enact general and permanent legisla-

tion, and that it must be construed to be limited in its operations to the particular appropriation of which it forms a part."

Since this decision, duties, sometimes at the rate of 45 per cent and sometimes at the rate of 60 per cent, have been collected on lenses and lens glasses, being illuminating apparatus intended for light-house use.

The estimates made by the Light-House Board, and now before Congress, for the establishment of many light-stations were based upon the theory that lenses and lens glass for the use of the Light-House Establishment would be imported free of duty. These lenses cost, according to their size and character, from $540 to $6,328 each. The addition of 45 per cent, and in many cases 60 per cent, duties to the original cost will in each case bring the amount to be paid from the appropriation for the establishment of each light-house that much beyond the estimate for the establishment of the light which is now before Congress. From this it will be seen that not one of these lights can be established for the amount which it has been estimated the light would cost.

In view of this decision of the Comptroller, this Department, at the instance of the Light-House Board, has the honor to recommend that the proviso in the act of March 3, 1893 (27 Stat. L., 575), be modified, reenacted, and made part of the next sundry civil appropriation act, in that part relating to repairs, etc., of light-houses, so that it will stand as follows:

"That lenses and lens glass constituting, in whole or in part, illuminating apparatus for the use of the Light-House Establishment may be imported hereafter free of duty."

OPEN PURCHASE.

The following letter from the inspector of the Third light-house district, who, to a large extent, purchases the supplies for the Light-House Establishment, will show the desirability of so modifying the laws requiring the purchase of such material and permitting its purchase under due restrictions in the open market:

In reply to the Board's letter requesting my reasons for my recommendation that illuminating oil, wicks, and chimneys for light-houses, and ground tackle for light-vessels, should be exempted from the provisions of law requiring that they should be bought from the lowest bidder, and that they should be placed on the same footing as certain articles bought for the Navy under section 3721 of the Revised Statutes, I have the honor to state the general reason that the articles before mentioned should be absolutely above suspicion, and should therefore be bought only from dealers who are known to have the capacity to furnish really good things and the honesty to do so.

I beg leave further to give separately the reasons for open purchase of each of the articles before mentioned.

Illuminating oil.—The oil used in light-houses and light-vessels is a special and not a commercial oil, the tests are high, and if anything goes wrong with the contractor it is not possible to buy in the open market. Some years ago, owing to the failure of a contractor to deliver good oil, the Light-House Establishment ran short of oil and some poor oil was accepted. Owing to the use of this poor oil a United States vessel worth $700,000 or $800,000 was almost lost; this would have been a money loss to the Government amounting to the whole cost of oil for fifteen or twenty years. The only sure way of getting good oil is to buy from an experienced and honest refiner, and, as our oil is not a commercial article, this means that we should buy year after year from the same refinery.

In my opinion, the proper way to buy oil is to get it from the best dealer on a continuing contract, the price to be settled yearly or half yearly by agreement between the contractor and the Secretary of the Department of Commerce and Labor, the basis of the price to be the current price of crude oil. I am quite sure that this method of buying oil would not cause any increase of expense.

* * * * * * *

Wicks.—The open purchase of these is not of great importance, but they are included as a matter of consistency, as they are factors in maintaining good lights.

* * * * * * *

Light-vessels ground tackle.—The only sure way of getting good ground tackle is for the Department of Commerce and Labor to examine the plants of manufacturers and their commercial honesty, and then to authorize the Light-House

Board to contract with approved firms, in no case allowing a manufacturer to prove his capacity at the risk of our light-vessels.

It is not only of importance for the safety of our light-vessels and their crews to have good ground tackle, but it is of immense importance to mariners generally to be able to rely on our light-vessels being in position, especially in bad weather. Specifications and tests as to material are useless unless the contractors are honest.

The Board concurs in these suggestions and recommends that in the act making the appropriations a clause be inserted providing that illuminating oil for light-houses, wicks for light-houses, chimneys for light-houses, and ground tackle for light-vessels may be exempt from the provisions of law which require that they shall be purchased from the lowest bidder after advertisement, as is done for certain articles for the Navy, under section 3721 of the United States Revised Statutes.

THE REGULATION OF PRIVATE AIDS TO NAVIGATION—THE PROHIBITION OF PRIVATE LIGHTS.

The act approved on June 20, 1906, provides—

That after the 1st day of January, 1907, it shall be unlawful for any person, company, corporation, or municipality not under the control of the Light-House Board to establish, erect, or maintain in the navigable waters of the United States any light as an aid to navigation, or any other aid to navigation similar to any of those maintained by the United States under the control and direction of the Light-House Board, without first obtaining permission so to do from the Light-House Board, in accordance with rules and regulations to be established by the Secretary of Commerce and Labor; and any person violating the provisions of this section or any of the rules and regulations established by the Secretary of Commerce and Labor in accordance herewith shall be deemed guilty of a misdemeanor and be subject to a fine not exceeding the sum of $100 for each offense, and each day during which such violation shall continue shall be considered as a new offense.

The regulations required by this act were drawn so that they went into effect early in the year. The Board now considers applications for the establishment and maintenance of private lights and other aids to navigation, and is in a position also to initiate legal proceedings against those who render themselves guilty of misdemeanor by establishing or maintaining private aids to navigation without the requisite permission.

Between the time when the regulations went into operation (February 26, 1907) and the end of the fiscal year, 105 private aids to navigation had been authorized.

LIGHTING BRIDGES.

All persons operating bridges over navigable rivers are required by the act approved on August 7, 1882, to maintain such lights on them as may be required by the Light-House Board. The Board issued a set of regulations for lighting such bridges, fully illustrated by diagrams. Persons operating such bridges have, however, obeyed these regulations only so far as they have chosen, as there is no penalty prescribed by the law for the infraction of the law. The Board recommends that a penalty be prescribed of, say, not exceeding $100 for each night of failure to comply with the regulations of the Board for lighting such rivers.

PROCEEDS FROM SALES AND LEASES OF LIGHT-HOUSE PROPERTY.

When light-house property is sold the proceeds go directly into the United States Treasury and not to the funds for the maintenance of the Light-House Establishment. This is required by section 3618, Revised Statutes, which demands that—

all proceeds of sales of old material, condemned stores, supplies, or other property of any kind * * * shall be deposited and covered into the Treasury as miscellaneous receipts on account of "Proceeds of public property."

Several branches of the Government are excepted out of that provision. The Reclamation Service is permitted to build dams, etc., from the proceeds of certain public lands. The proceeds of the sale or leasing of marine hospitals, of the sale of revenue cutters, of the sale of commissary stores to officers and enlisted men of the Army, of material, stores, or supplies sold to officers and soldiers of the Army, of the sale of condemned navy clothing, of the sale of material, stores, or supplies to any exploring or surveying expedition authorized by law, and, finally, the proceeds of sold property which has been acquired for the improvement of rivers and harbors and is no longer needed go to reimburse the appropriation from which the sold articles were bought.

The following quotation from the river and harbor act approved on June 13, 1902, provides that the proceeds of certain property sold under it shall be credited to the appropriation from which such property was bought:

That when any land or other property which has been heretofore or may be hereafter purchased or acquired for the improvement of rivers and harbors is no longer needed, or is no longer serviceable, it may be sold in such manner as the Secretary of War may direct, and the proceeds credited to the appropriation for the work for which it was purchased or acquired * * *. (See vol. 32, pt. 1, p. 373, Stat. L.)

The Board suggests that action be taken to have the proceeds of the sales of light-house property credited to the proper appropriation for the maintenance of the Light-House Establishment.

The Department of Commerce and Labor, at the instance of the Light-House Board and by authority of the act approved on March 3, 1879 (vol. 20, U. S. Stat., p. 383), leases from time to time parcels of unoccupied and unproductive light-house property for a period not exceeding five years. The proceeds thereof are now turned into the United States Treasury. The Board recommends that such proceeds be credited to the proper appropriation for the maintenance of the Light-House Establishment.

The Board further recommends that action be taken to have the amounts paid to the Government in compensation for damages inflicted by collision by passing vessels with light-vessels, buoys, and other aids to navigation paid in to the credit of the proper appropriations for maintaining the Light-House Establishment. There were numerous cases of such collision, which are detailed under proper headings, and the amount paid in each case went into the Treasury under the head of "Miscellaneous proceeds," while the Board's appropriations were depleted to that extent.

INCREASE IN CLERICAL FORCE.

The following recommendation, which was made in the Board's last three annual reports, is renewed:

The Board asks an additional $1,800 clerk that its appointment clerk, who now is paid but $1,600, may receive the sum named. The Board now has some 6,000 persons in its employ, each of whom receives an appointment. The additional responsibility devolved on the appointment clerk, together with the additional labor, requires this increase of pay. And then, too, this increase is needed that the work done in this office may be paid for at the same rate that the same work is paid for in other offices.

The Board continues to ask that the pay of the draftsman who is in charge of the Board's drafting room in the absence of its assistant civil engineer be raised from $1,800 to $2,000 a year, not only that he may be properly compensated for his labor, but that the work done in this office may be paid for at the same rate that the same work is paid for in other offices. He has held this position since 1884, and his work has increased about threefold in that time.

Last year the Board asked for three clerks of class 1, and it was granted two. The Board now asks one additional clerk of class 1 for the same reason for which it asked for three last year.

The Board asks for a chief messenger, as the messenger work has largely increased since its offices were moved from one floor of the Treasury building to four floors of the rented building in which it is now quartered. Clerks are now doing the work which messengers could do better at from one-half to one-fourth the rate clerks are paid.

OBSTRUCTION OF RANGE LIGHTS.

The following is a copy of a letter, dated January 12, 1906, from the Secretary of Commerce and Labor to the President of the Senate:

The Department's attention has recently been called to the fact that vessels are frequently anchored in our harbors and other public navigable waters so as to obstruct the range lights established therein by the Department in aid of navigation. At the present time there is no Federal law prohibiting this; a number of the States have, however, enacted statutes making it unlawful to obstruct or interfere with aids to navigation established within their limits, but in some of these statutes no provision has been made to prevent the obstructing of range lights. Federal instead of State legislation on this subject is urgently needed, and it is recommended that a general law be passed by Congress making it unlawful and punishable by fine for any vessel to anchor in any navigable waters of the United States in such a manner as to obstruct or interfere with the range lights or other aids to navigation established therein.

SUBMARINE FOG-SIGNALS.

The following is a list of light-vessels on which submarine fog-signals are sounded as a regular aid to navigation, and which were bought and paid for during the last fiscal year:

Cape Elizabeth, Maine, No. 74.
Boston, Mass, No. 54.
Pollock Rip Shoals, Massachusetts, No. 73.
Vineyard Sound (Sow and Pigs), Massachusetts, No. 41.
Nantucket Shoals, Massachusetts, No. 66.
Brenton Reef, Rhode Island, No. 39.
Cornfield Point, Connecticut, No. 48.
Fire Island, New York, No. 68.
Sandy Hook, New Jersey, No. 51.
Relief, Third light-house district, No. 78.
Five-Fathom Bank, New Jersey, No. 79.
Fenwick Island Shoal, Delaware, No. 52.
Winter-Quarter Shoal, New Jersey, No. 45.
Tail of the Horseshoe, Virginia, No. 46.
Overfalls, Delaware, No. 69.
Cape Charles, Virginia, No. 49.
Diamond Shoal, North Carolina, No. 71.
Diamond Shoal, North Carolina, No. 72.
Relief, Sixth light-house district, No. 53.

The following is a list of light-vessels on which submarine fog-signals are now experimentally sounded.

White Shoal, Michigan, No. 56.
Grays Reef, Michigan, No. 57.
Lansing Shoal, Michigan, No. 55.
Eleven-Foot Shoal, Michigan, No. 60.
Lake Huron, Michigan, No. 61.
Poe Reef, Michigan, No. 62.

List of submarine fog-signals authorized on light-vessels prior to June 30, 1907, but not put into operation at that date:

South Pass, Louisiana, No. 43.
Heald Bank, Texas, No. 81.
San Francisco, Cal., No. 70.
Blunts Reef, California, No. 83.
Umatilla Reef, Washington, No. 67.
Relief, No. 76.
Frying-Pan Shoals, North Carolina, No. 1.
Columbia River, Oregon, No. 50.

The Board also had authorized the establishment of a submarine fog-signal to be operated experimentally in Lake Huron from land near Detour light-station, Mich.

ESTIMATES FOR GENERAL APPROPRIATIONS.

Supplies for light-houses	$800,000.00
Repairs of light-houses	1,000,000.00
Salaries of light-keepers	1,100,000.00
Expenses of light-vessels	1,000,000.00
Expenses of buoyage	1,200,000.00
Expenses of fog-signals	300,000.00
Lighting of rivers	450,000.00
Survey of light-house sites	1,000.00
Oilhouses for light-stations	50,000.00
Maintenance of lights on channels of Great Lakes	4,000.00
Southeast Shoal light-vessel, Lake Erie	4,000.00
Guantanamo light-house service	8,000.00
Porto Rico	100,000.00
Light-house keepers' dwellings	120,000.00
Repairs to tender *Pansy* for general light-house service	50,000.00
Reimbursement of the owners of the schooner *Thomas W. H. White*	260.02
Reimbursement of the Burlee Dry Dock Company	29.93
Reimbursement of the owners of the schooner *Bayard Barnes*	12.00
Reimbursement of Warrington Wharf Company, Warrington, Fla.	11.40
Reimbursement for losses of a light-keeper in the Seventh light-house district	124.75
Reimbursement of the heirs of a light-keeper in the Eighth light-house district	450.50
Reimbursement of light-keeper of Bolivar Point light-station, Texas	234.48
Reimbursement for losses of an assistant light-keeper in the Seventh light-house district	75.00
Reimbursement of the owners of the towboat *Charles Chamberlain*	35.00
Reimbursement for losses of light-keepers in the Eighth light-house district	2,603.62
Reimbursement of the Territory of Hawaii	23,393.69
Reimbursement of the officers and crew of the light-house tender *Manzanita*	1,642.55
Reimbursement of the owners of the steamer *Clyde*	79.95

Special estimates.

FIRST DISTRICT.

Clarks Ledge, entrance to St. Croix River, light and fog-signal station, Maine	$50,000.00
Buckle Island, entrance to York Narrows, range lights, Maine	18,000.00
Boone Island light and fog-signal station, Maine	10,000.00
Tender for the use of the engineer of the First and Second light-house districts	200,000.00
Tender for the use of the inspector of the First light-house district	200,000.00

SECOND DISTRICT.

Dog Bar Breakwater light and fog-signal station, Gloucester, Mass.	$42,795.00
State Ledge light and fog-signal station, Massachusetts	52,000.00

THIRD DISTRICT.

The Dumplings fog-signal station, off Conanicut Island, Rhode Island	$10,000.00
Plum Beach light-station, Rhode Island, fog-signal	1,343.00
Southwest Ledge, Long Island Sound, Connecticut, to complete	55,000.00
Staten Island light-house, New York Harbor, New York, additional	50,000.00
Jeffreys Hook light, Hudson River, New York	3,400.00
Iona Island light, Hudson River, New York	2,000.00
Negro Point, Wards Island, light and fog-signal station, New York	10,000.00
Hunts Point, East River light and fog-signal station, New York	5,000.00
General light-house depot, Tompkinsville, N. Y.:	
Extension of blacksmith shop	20,000.00
Extension of the north and south wharves	40,000.00
Spar shop	3,000.00
Wooden dump scow	7,500.00
Quarters for assistant to the light-house inspector and for the assistant to the light-house engineer	20,000.00
Light-house depot, San Juan, P. R	15,000.00

FOURTH DISTRICT.

Elbow of Cross Ledge, Delaware Bay, light-house and fog-signal, additional	$21,500.00
Joe Flogger Shoal light, Delaware Bay, Delaware, additional	55,000.00
Reedy Island range rear light, Delaware River, Delaware, for completing	25,000.00
Goose Island Flats light, Delaware Bay, Delaware, additional	45,000.00
Schooner Ledge range rear light, Delaware River, Pennsylvania	10,650.00
Block House pier day beacon, Delaware River, Pennsylvania	4,500.00
Edgemoor light-house depot, Delaware River, Delaware:	
For additional land	41,000.00
For two dwellings for custodians	16,000.00
Oilhouse	1,500.00

FIFTH DISTRICT.

Great Point Bar light-station, Maryland	$10,000.00
Ragged Point light and fog-signal station, Potomac River, Virginia, additional	15,000.00
Cape Henry light-vessel, Virginia	115,000.00
Fort McHenry Channel ranges, Maryland	125,000.00
Washington, D. C., light-house depot	40,000.00

SIXTH DISTRICT.

Tender for the use of the engineer of the Sixth light-house district	$25,000.00

SEVENTH DISTRICT.

Cape Romano light-station, Florida	$45,000.00

EIGHTH DISTRICT.

Sabine Pass jetty light and fog-signal station, Louisiana and Texas	$40,000.00
Light-house depot at Fort San Jacinto, Galveston Harbor, Texas	18,000.00
Galveston jetty and fog-signal station	10,000.00
Sand Island light-station, Alabama, keeper's dwelling	6,500.00

NINTH DISTRICT.

Fishermans Shoal light and fog-signal station, Wisconsin	$100,000.00
Little Gull Island light and fog-signal station, Michigan	30,000.00
Point aux Barques light and fog-signal station, Michigan	45,000.00
North Manitou light-vessel, Lake Michigan, Michigan	50,000.00
Milwaukee light-vessel, Lake Michigan, Michigan	75,000.00
Relief light-vessel No. 82, for use in the Ninth and Eleventh light-house district, additional	20,000.00

TENTH DISTRICT.

Fairport fog-signal, mouth of Grand River, Lake Erie, Ohio	$2,500.00
Lorain range lights, entrance to Lorain Harbor, Black River, Lake Erie	12,300.00
Cleveland Harbor lights, Ohio	45,000.00

ELEVENTH DISTRICT.

Portage River pierhead fog-signal, Lake Superior, Michigan	$22,000.00
Eagle River light and fog-signal station, Lake Superior, Michigan	38,000.00
Portage Lake ship canals light-station, Lake Superior, Michigan	55,000.00
Gull Island, Apostle Group, light and fog-signal station, westerly end of Lake Superior, Wisconsin	85,000.00
Rock Harbor, Isle Royale range lights, Lake Superior, Michigan	21,000.00

TWELFTH DISTRICT.

San Pedro Breakwater light and fog-signal station, San Pedro Harbor, California	$36,000.00
Piedras Blancas light-station oilhouse, California	1,500.00
Pigeon Point light-station, California:	
Additional land	5,000.00
Oilhouse	1,500.00
Bonita Point light-station, double dwelling for light-keepers, additional	2,000.00
Point Reyes light-station oilhouse, California	1,500.00
Punta Gorda light and fog-signal station, seacoast of California	60,000.00
Army Point light and fog-signal station, Suisun Bay, California	10,000.00
Light-house depot, Honolulu, Hawaii	40,000.00
Guam light-house service	25,000.00
Midway Islands light-house service	111,000.00
Samoan light-house service	25,000.00
Kilauea Point light-station, Hawaii	75,000.00
Cape Kumukahi light-station	75,000.00

THIRTEENTH DISTRICT.

Eliza Island light-station, Bellingham Bay, Puget Sound, Washington	$30,000.00
Cape Hinchinbrook light and fog-signal station, Alaska, to complete	50,000.00
Resurrection Bay light and fog-signal station, Alaska	100,000.00
Light-vessel off Orford Reef, Cape Blanco, Oregon	130,000.00

FIRST DISTRICT.

This district extends from the head of navigation on the St. Croix River, Maine, the northeastern boundary of the United States, to and includes Hampton Harbor, New Hampshire. It embraces all aids to navigation on the seacoast of Maine and New Hampshire and on all tidal waters between the limits named.

Inspector.—Commander Frank A. Wilner, U. S. Navy, to December 31, 1906; Commander Edward E. Wright, U. S. Navy, to February 25, 1907; since that date Lieut. Commander John D. McDonald.

Engineer.—Maj. Edward Burr, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights	78
Light-vessel in position	1
Day, or unlighted, beacons	133
Fog-signals operated by steam or oil engines	17
Fog-signals operated by machinery	31
Gas-lighted buoys in position	2
Whistling buoys in position	23
Bell buoys in position	31
Other buoys in position	822
Steamers *Lilac* and *Geranium*, buoy tenders and for supply and inspection	2
Steamer *Myrtle*, for construction and repair in the First and Second districts	1

NOTE.—The number preceding the name of a light-station in the First, Second, Third, Fourth, Fifth, Sixth, Seventh, and Eighth districts is that by which it is designated in the List of Lights and Fog-Signals on the Atlantic and Gulf Coasts of the United States, corrected to March 1, 1907.

LIGHT-STATIONS.

1. Whitlocks Mill, St. Croix River, Maine.—Effort is being made to obtain title to additional land for this station.

2. St. Croix River, on Dochet Island, Maine.—A brick oilhouse was built and minor repairs were made.

—. *Clark Ledge, entrance to St. Croix River.*—This ledge, which is bare at low water, is at the entrance to St. Croix River, Maine. It lies about 1,125 feet above Todd Head and is about 300 feet from shore. It is situated in a very strong tidal current, and is undoubtedly a great menace to navigation. The average rise of tide is 18.2 feet. In the passage between Clark Ledge and Deer Point, about five-eighths of a mile to the north of the ledge, there are whirlpools which on spring tides extend two-thirds of the way across the passage between Deer Point and Dog Island, about one-quarter of a mile northeasterly from Clark Ledge. These whirlpools are also a menace to navigation and in endeavoring to avoid them several vessels,

it is reported, have been wrecked on both Clark Ledge and Dog Island.

A light with a fog-signal is much needed at this point to guide vessels clear of the dangers of the whirlpools off Dog Island, and off Clark Ledge itself. The Maine legislature has conveyed title to the ledge and jurisdiction over it to the United States. The Board estimates that the light and fog-signal can be established for not exceeding $50,000, and it recommends that an appropriation of that amount be made therefor.

25. Isle au Haut, at Robinson Point, northwesterly side of Isle au Haut, Me.—The act approved June 20, 1906, appropriated $14,000 for the construction of a light and fog-signal station at Isle au Haut, Me. The land for a site has been purchased and measures are being taken for the building of the station.

—. *Buckle Island, entrance to York Narrows, Maine.*—The following recommendation, made in previous annual reports of the Board, and last in that for 1905, is renewed:

The Board is informed that something more than 1,000 sailing vessels, carrying lumber, fish, hay, coal, granite, and general merchandise, annually use this passage. There are also several lines of steamboats, some of which make two trips a day, carrying large numbers of passengers to and from Bar Harbor and other points along the shore, which would be benefited by lights on Buckle Island. In the early spring and late fall steamers, and especially sailing vessels, find it necessary to go through the passage during the night, when a light on Buckle Island would be of great assistance to them. It is further stated that several vessels have been cast away on Buckle Island, among them the schooner *Walter Scott*, which was wrecked in the winter of 1870. It is proposed, if the necessary appropriation is made, to place a white light with four red sectors, with a post range light 100 feet in front of the main light. It is estimated that these range lights can be established at a cost not exceeding $14,000, and it is recommended that an appropriation of this amount be made therefor.

On account of the increase in the cost of materials and labor since that estimate was made, it is now estimated that such a station will cost $18,000, and it is recommended that an appropriation of this amount be made therefor.

52. The Cuckolds, entrance to Boothbay, Me.—A brick cistern for the fog-signal and a wooden cistern for domestic purposes were built. A tower was built over the fog-signal house and a fourth-order light was established giving a double white flash every six seconds.

63. Ames Ledge, Kennebec River, Maine.—Additional land, with a right of way to it from the public highway, was purchased.

77. Boon Island, seacoast of Maine.—The following is an extract from the Board's last four annual reports:

Rear-Admiral (then Capt.) R. D. Evans, U. S. Navy, member of the Light-House Board, stated at the session of the Board held on October 4, 1897, that on his summer cruise he arrived off Boon Island, Maine, light-house in a fog and failed to hear the fog-signal—a bell struck by hand—under circumstances when a failure to hear it might have been extremely dangerous. The Board thereupon made investigation of the needs of commerce and navigation, and arriving at the conclusion that while a more efficient fog-signal was needed in that vicinity, it would be most useful at White Island, one of the Isles of Shoals, it so recommended in its annual report for 1897, and repeated it in each annual report since, that an appropriation of $5,500 be made for that purpose. The Board has now become convinced from recent developments that the most desirable point in the region of the Isles of Shoals for a fog-signal is Boon Island. The steamers plying between Boston and Bangor run from Seguin light, at the mouth of Kennebec River, for Boon Island, and the steamers from Portland and

from St. John to Boston all run for Boon Island in the winter, and they are all afraid of Pollocks Rock, nearly a mile southwesterly from Boon Island. The Board therefore now recommends that an effective fog-signal be established at Boon Island in addition to the bell fog-signal now there, which bell will be of use in case of the disability at any time of the proposed new fog-signal. It is estimated that such a fog-signal can be established at Boon Island for a sum not to exceed $10,000, and the Board recommends that an appropriation of that amount be made therefor.

DAY OR UNLIGHTED BEACONS.

Inner Ledges, Camden Harbor, Maine.—The distinguishing mark was renewed.

Northeast Point Ledges, Camden Harbor, Maine.—The distinguishing mark was renewed.

Bremen Long Island, Flying Passage, Maine.—A beacon, consisting of an iron spindle with cask on end, was established.

Sweets Island, Sheepscot River, Maine.—A beacon, consisting of an iron spindle 35 feet long, surmounted by a cask on bilge, both painted black, was established on the north end of the island.

Ram Island, Sheepscot River, Maine.—A beacon, consisting of an iron spindle 35 feet long, surmounted by a cask on end, the spindle painted black and the cask painted white, was established off the northeast end of the island.

Crow Island Ledge, Sheepscot River, Maine.—A beacon, consisting of an iron spindle 35 feet long, surmounted by a cask on end, the spindle painted red and the cask painted white, was established.

OILHOUSES.

During the year oilhouses were built at St. Croix River and Goat Island.

LIGHT-VESSEL.

65. Cape Elizabeth light-vessel, No. 74, entrance to Portland Harbor, Maine.—This steam, self-propelling, wooden vessel was built in 1902. Her displacement is 495 tons. She has a steam fog-signal. On December 5, 1906, upon being relieved by light-vessel No. 53, she came to Portland, where her boilers were retubed and received minor repairs. She resumed her station on January 11, 1907, and the relief light-vessel was withdrawn. On January 15, 1907, her submarine bell was sounded regularly as a fog-signal, striking the number of the vessel, "74," during thick and foggy weather. During the year she received needed fitments, supplies, and repairs.

FOG-SIGNALS OPERATED BY ENGINES.

4. West Quoddy Head, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 1,507 hours during the year and consumed about 94 tons of coal.

7. Libby Islands, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 1,689 hours during the year and consumed about 126 tons of coal.

12. Petit Manan, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 1,482 hours during the year and consumed about 82 tons of coal.

15. Mount Desert, Me.—This first-class Daboll trumpet, in duplicate, was in operation some 1,491 hours during the year and consumed about 819 gallons of oil.

16. Egg Rock, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 1,813 hours during the year and consumed about 762 gallons of oil.

19. Great Duck Island, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 1,482 hours during the year and consumed about 77 tons of coal.

31-32. Matinicus Rock, Maine.—This 12-inch steam whistle, in duplicate, was in operation some 1,504 hours during the year and consumed about 103 tons of coal.

34. Whitehead, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 1,582 hours during the year and consumed about 89 tons of coal.

36. Rockland Breakwater, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 906 hours during the year and consumed about 498 gallons of oil.

47. Manana Island, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 1,132 hours during the year and consumed about 567 gallons of oil.

52. Cuckolds, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 1,236 hours during the year and consumed about 618 gallons of oil.

64. Seguin, Maine.—This 10-inch steam whistle, in duplicate, was in operation some 902 hours during the year and consumed about 72 tons of coal.

65. Cape Elizabeth light-vessel, No. 74.—This 12-inch steam whistle, in duplicate, was in operation some 671 hours during the year and consumed about 33 tons of coal.

Relief light-vessel, No. 53.—This 12-inch steam whistle, in duplicate, was in operation some 117 hours during the year and consumed about 15 tons of coal.

66. Halfway Rock, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 796 hours during the year and consumed about 504 gallons of oil.

67-68. Cape Elizabeth, Maine.—This 12-inch steam whistle, in duplicate, was in operation some 927 hours during the year and consumed about 51 tons of coal.

71. Portland Head, Maine.—This first-class Daboll trumpet, in duplicate, was in operation some 977 hours during the year and consumed about 529 gallons of oil.

78. Whaleback, New Hampshire.—This first-class Daboll trumpet, in duplicate, was in operation some 1,151 hours during the year and consumed about 517 gallons of oil.

BUOYAGE.

During the year there were established 1 wooden tripod and 4 iron spindles, 3 whistling buoys, 5 bell buoys, 2 can buoys, and 14 spar buoys. One bell buoy was discontinued, one spar buoy was substituted for a bell buoy, and one gas buoy has been established in place of a spar. There are 23 whistling and 31 bell buoys in position.

LIGHT-HOUSE DEPOTS.

Little Diamond Island, Portland Harbor, Maine.—In this depot are deposited the supplies, buoys, coal, etc., for the greater part of the light-house district. Various repairs were made.

Bear Island, Maine.—The buoys, coal, and supplies for stations in the immediate vicinity are kept here. Various repairs were made.

TENDERS.

Lilac.—The *Lilac* was built in 1892, is of steel, single screw, and of a displacement of 550 tons. She was hauled out, cleaned, and painted. She was employed in buoy work, inspections, carrying supplies to stations and coal and water to the light-vessel. She steamed about 12,798 miles and consumed some 1,162 tons of coal. She established 16 buoys, replaced 59 buoys, changed 114 buoys, painted 213 buoys, recovered 33 buoys, delivered 55 tons of coal to light-vessel No. 74 and 18½ tons to light-stations, delivered oil and general supplies to 39 light-stations, and worked 219 hours at the light-house depot on buoys.

Geranium.—This wooden side-wheel steamer was built in 1863 and is of about 556 tons burden. She steamed about 5,706 miles and consumed some 562 tons of coal. She established 3 buoys, replaced 72 buoys, changed 94 buoys, painted 238 buoys and 2 tripods, recovered 9 buoys, delivered 60 tons of coal to light-vessel No. 74, oil and general supplies to 31 light-stations, and worked 713 hours at the light-house depot on buoys. She is so old and frail that she is beyond economical repair, and it is not unlikely that she will, on survey, be condemned, and that her sale will be ordered in the near future.

It is estimated that a new tender, of proper size and ample power suitable to take the place of the *Geranium*, and able to do the needed additional work, can be built for not exceeding $200,000, and the Board recommends that an appropriation of that amount be made therefor.

Myrtle.—This wooden screw steamer was built in 1872, and is of about 348 tons gross burden. She steamed about 9,470 miles, and consumed some 864 tons of coal, and, except when laid up for repairs, was continuously occupied in delivering materials at stations. Her machinery was overhauled and repaired. When this tender was built it was well adapted to the needs of the two districts but in the thirty-five years the *Myrtle* has been in commission these needs have greatly increased. The storage capacity of the vessel, which has been considerably reduced by the installation of additional machinery and necessary modern appliances, and by the extension of her deck houses and lessening of space in the forehold to provide accommodations for the increased number of officers and crew (from 14 to 19), is inadequate for the demands now made on her, and, for the prompt, efficient, and economical dispatch of work a new, larger, and more commodious tender is necessary. The estimated cost of such a tender is $200,000, and it is recommended that an appropriation of that amount be made therefor.

SECOND DISTRICT.

This district extends from Hampton Harbor, New Hampshire, to Elisha Ledge, off Warren Point, Rhode Island, but does not include either the harbor or the ledge. It embraces all aids to navigation on the seacoast and tidal waters of Massachusetts, excepting on the Taunton River and that part of Mount Hope Bay lying within the State boundary.

Inspector.—Commander William A. Marshall, U. S. Navy, until September 30, 1906; since then Commander Edward E. Wright, U. S. Navy.

Engineer.—Maj. Edward Burr, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and lighted beacons	91
Light-vessels in position	11
Light-vessels for relief	1
Day or unlighted beacons	75
Fog-signals, steam or air	8
Fog-signals, bell, rung by machinery	16
Whistling buoys in position	12
Lighted buoys, gas, in position	12
Bell buoys in position	24
Electric bell buoy in position	1
Other buoys in position	582
Ice buoys for winter use	10
Steam tenders *Mayflower*, *Azalea*, and *Verbena*, buoy tenders and for supply and inspection	3
Steamer *Myrtle* for construction and repair in the First and Second districts	1

LIGHT-STATIONS.

86–87. Newburyport Harbor Upper Harbor, Newburyport, Mass.—The color of the inner light on March 15, 1907, was changed from green to red.

90. Annisquam Harbor, east side of entrance to the harbor, Massachusetts.—The light-station was connected with the city water supply.

92–93. Cape Ann, Thatcher Island, seacoast of Massachusetts.—A hoisting engine house was built of masonry. Various repairs were made.

94. Eastern Point, entrance to Gloucester Harbor, Massachusetts.—A fog-signal house was built of masonry, and various repairs were made.

—. Dog Bar Breakwater, entrance to Gloucester Harbor, Massachusetts.—The following recommendation, which was made in the last three annual reports of the Board, is renewed:

This breakwater is to extend 2,250 feet from the shore at Eastern Point across the entrance to Gloucester Harbor. The substructure is a rubble mound built to the height of mean low water; the superstructure is of dimension stones built to the height of 7.5 feet above mean high water with a width of 10 feet on top.

It has been found very difficult to maintain a post light on the end of the substructure during the winter, and although a lighted buoy has been kept off its outer end quite a number of vessels have, from time to time, been seriously damaged by colliding with it. The Board recommends that a light be placed on the outer end of the breakwater, which is now approaching completion, and that a fog-signal by bell or trumpet be also established. It is estimated that a light-house with a fog-signal operated by compressed air and a first-class Daboll trumpet, the tower to be of iron with iron deck and fourth-order lantern, would cost $42,795. The Board recommends that an appropriation of that amount be made therefor.

97–98. Bakers Island, entrance to Salem Harbor, Massachusetts.—About 150 feet of boundary fence was built, and minor repairs were made. The act approved on June 20, 1906, appropriated $10,000 for establishing a fog-signal here. A brick fog-signal house and an oilhouse were built, and a fog-signal plant, consisting of a siren operated by two 20-horsepower oil engines, was installed. On July 8, 1907, the signal will be in readiness for operation.

102. Marblehead, southeast side of the entrance to Marblehead Harbor, Massachusetts.—A brick oilhouse was built, and various repairs were made.

106. Sandy Point, Lynn Harbor, Massachusetts.—The dolphin, which has been carried away, was rebuilt about 50 feet westerly from its old location and protected with riprap.

—. *State Ledge, Boston Harbor, Massachusetts.*—At this ledge vessels coming into port change their course from President Roads to enter the upper main ship channel. At night and in thick weather a light-station, with fog-signal, is needed to show vessels just where to turn from the Roads into the channel.

The following recommendation, which was made in the last sixteen annual reports of the Board, is renewed:

The ship channel from the Boston wharves to Nix Mate buoy has no aids to navigation except buoys. Vessels find it very difficult in thick weather and at night to keep in the channel, and they are particularly perplexed to know just where to turn in the neighborhood of State Ledge and buoy No. 8, both in leaving and entering the harbor. Large excursion steamers, as well as steamers of the regular lines running out of Boston, frequently have to anchor in thick weather solely because they have no guide between Nix Mate buoy and the wharves. This greatly incommodes business men going and coming during the summer months, when fogs are prevalent. The Board has recognized for a long time the necessity for a light and fog-signal at this point, but has postponed action while the improvements in the channel of the harbor in charge of the United States engineers were in progress. The Board is of opinion that the time has arrived when a light and fog-signal ought to be established near buoy No. 8, or at or near State Ledge. It is estimated that it will cost $42,000 to establish a light and fog-signal at this point.

It is recommended that an appropriation of this amount be made therefor.

The following extract from the Board's last three annual reports is renewed:

Owing to the recent rise in the cost of materials and labor, the construction of this station will cost more now than when the estimate of $42,000 was made, fourteen years ago. The amount of the estimate should be increased from $42,000 to $52,000, and it is recommended that an appropriation of the latter amount be made therefor.

134–135. Plymouth (Gurnet), entrance to Plymouth Harbor, Massachusetts.—A fog-bell house of modern type was built and a 1,500-pound fog bell, with striking machine, installed. Various repairs were made.

137. Race Point, northerly point of Cape Cod, Massachusetts.—An additional cistern for the fog-signal supply and another for the domestic water supply was built and various repairs were made.

140. Mayo Beach, at the head of Wellfleet Harbor, Massachusetts.—A brick oilhouse was built.

141. Billingsgate Island, near the entrance to Wellfleet Harbor, Massachusetts.—A boathouse was built and various repairs were made.

158. Nantucket (Great Point), northeast extremity of Nantucket Island, Massachusetts.—An additional cistern was built for the domestic water supply. Various repairs were made.

162. Brant Point, west side of entrance to Nantucket Harbor, Massachusetts.—About 500 tons of large riprap stones were placed on the north beach.

163–164. Nantucket Cliff Range, northerly side of Nantucket Island, Massachusetts.—The front light was moved about 34 feet westerly from its old location to bring the lights in range with the present location of the bell buoy at the entrance to the harbor.

177–178. Cottage City Breakwaters, Cottage City, Mass.—On March 15, 1907, the color of the light on the south breakwater was changed from green to red.

181. Nobska Point, northerly side of Vineyard Sound, Massachusetts.—A fog-bell tower of modern type was built and various repairs were made.

195. Ned Point, Mattapoisett, Mass.—A brick oilhouse was built and various repairs were made.

DAY OR UNLIGHTED BEACONS.

The Londoner, off Thatcher Island, Massachusetts.—The distinguishing mark was renewed.

Bowditch Beacon, Salem Harbor, Massachusetts.—A new cage was provided and the beacon painted.

Little Haste Beacon, Salem Harbor, Massachusetts.—The spindle was straightened and secured.

Satan Rock Beacon, Salem Harbor, Massachusetts.—The spindle was righted and secured.

Great Aquavitae Beacon, Salem Harbor, Massachusetts.—The spindle was righted and secured, a new cage was provided, and the spindle and cage were painted.

Halfway Rock Beacon, off Marblehead, Mass.—The distinguishing mark was replaced.

Little Aquavitæ Beacon, Salem Harbor, Massachusetts.—The spindle was righted and secured.

False Spit Beacon, Boston Harbor, Massachusetts.—A new cage was provided, about 100 tons of riprap were hauled in around the beacon, and the spindle and cage painted.

Pig Rocks Beacon, Boston Harbor, Massachusetts.—A new mast and cage were provided, secured in place, and painted.

Gallups Island, Boston Harbor, Massachusetts.—A beacon, consisting of a 5-pile dolphin surmounted by a spindle with cask on its bilge, all painted black, was established at about low-water mark on the easterly end of the island.

Sunken Pier Beacon, off Bass River, Massachusetts.—The beacon was renewed.

Angelica Rock Beacon, off Mattapoisett Harbor, Massachusetts.—The distinguishing mark was repaired.

OILHOUSES.

During the year oilhouses were built at Marblehead, Mayo Beach, and Ned Point, Massachusetts.

LIGHT-VESSELS.

No. 125. Boston light-vessel, No. 54, entrance to Boston Harbor, Massachusetts.—This steel, steam, self-propelling vessel was built in 1892, is of 490 tons displacement, has a steam fog-signal. On August 31, 1906, she was brought to Boston for repairs. She resumed her station on November 5, and relief light-vessel, No. 53, which had marked the station while this vessel was under repair, was withdrawn. She received during the year needed supplies and fitments.

No. 149. Pollock Rip Shoals light-vessel, No. 73, entrance to Nantucket Sound, Massachusetts.—This steel, steam, self-propelling vessel of 538 tons was built in 1901, and has a steam fog-signal. On July 17, 1906, a schooner ran into her, doing minor damage. Again, on July 22, the last barge of a tow of three struck her, doing some injury. These damages were repaired on the station and were paid for by the owners of the colliding vessels. On August 14 the second barge of a tow of three swung into her and inflicted minor damages. On August 15 this vessel, on being relieved by relief light-vessel, No. 9, started for New London, Conn., under her own steam; but her boiler tubes leaking, she put into Vineyard Haven, whence she was towed to her destination by the tender *Azalea* for repair of damages caused by collision as well as other repairs to hull, boilers, and machinery. She resumed her station September 18, 1906, and relief light-vessel, No. 9, was withdrawn. The owners of the colliding vessel paid the cost of the collision damage. This vessel received during the year needed fitments and supplies.

151. Pollock Rip light-vessel, No. 47, in Pollock Rip Slue, entrance to Nantucket Sound, Massachusetts.—This composite vessel of 410 tons was built in 1891, and is provided with a steam fog-signal. On August 3, 1906, a barge in a thick fog ran into her, doing minor damage. Repairs were made on the station and were paid for by the owners of the barge. On November 6, 1906, the last of a tow of two barges struck this vessel on the port side, causing slight damage. On November 17, 1906, a steamer struck her, inflicting other injuries, which were repaired on station and were paid for by the owners of the colliding vessel. On April 3, 1907, a schooner struck her, causing other minor damage, which was repaired on the station and paid for by the owner of the schooner. On May 1 another steamer collided with her, causing still other damages. On May 7, 1907, she was brought in for repairs and the station was marked by relief light-vessel, No. 9. When these and other repairs were completed, light-vessel No. 47 was returned to her station, and on June 1 light-vessel

No. 9 was withdrawn. Light-vessel No. 47 received during the year needed fitments and supplies.

153. Shovelful Shoal light-vessel, No. 3, off Monomoy Point, Cape Cod, Massachusetts.—This wooden vessel of about 140 tons gross burden was built in 1852, and has a bell for a fog-signal. On October 8, 1906, she was run into by a schooner, receiving minor damages, which were repaired on the station and were paid for by the owners of the schooner. She remained on her station during the entire year, and received needed supplies and fitments.

154. Handkerchief light-vessel, No. 4, Nantucket Sound, Massachusetts.—This wooden vessel of about 104 tons gross burden was built in 1855, and has a bell for a fog-signal. On May 12, 1907, a schooner collided with her, causing slight damages, which were repaired on her station and paid for by the owners of the schooner. The light-vessel remained on her station during the year and received needed fitments and supplies.

157. Great Round Shoal light-vessel, No. 42, off Nantucket, Mass.—This wooden vessel of about 410 tons gross burden was built in 1877. She has a compressed-air fog-signal. She remained on her station during the year and has received needed supplies and fitments.

160. Nantucket Shoals light-vessel, No. 66, about 41 miles to the southward and eastward of Nantucket, Mass.—This composite steam, self-propelling vessel of about 530 tons displacement was built in 1895–96. She has a steam fog-signal and she also has an electric lens lantern at her fore and main mast heads. On November 21, 1906, she steamed from her station to New Bedford, where she was repaired. On January 2, 1907, she resumed her station and relief light-vessel, No. 78, which had taken her place, was withdrawn.

172. Cross Rip light-vessel, No. 5, Nantucket Sound, Massachusetts.—This wooden vessel of about 130 tons burden, new measurement, was built in 1864, and has a bell for a fog-signal. On September 24, 1906, a barge collided with her, inflicting minor damages. On October 20 she was brought into New Bedford and repaired, the owners of the barge paying the cost. She resumed her station on November 9, 1906, and relief light-vessel, No. 9, which had taken her place, was withdrawn. She received during the year needed fitments and supplies.

173. Succonnesset Shoal light-vessel, No. 6, Nantucket Sound, Massachusetts.—It is not known when this wooden vessel was built, but she was thoroughly repaired in 1890. She is of about 140 tons gross burden, and has a bell for a fog-signal. She remained on her station during the year and received needed supplies and fitments.

188. Vineyard Sound (Sow and Pigs) light-vessel, No. 41, western entrance to Vineyard Sound, Massachusetts.—This wooden vessel is of about 387 tons burden, old measurement, was built in 1876, and has a steam fog-signal. She remained on her station during the year and received needed supplies and fitments.

189. Hen and Chickens light-vessel, No. 2, entrance to Buzzards Bay, Massachusetts.—This wooden vessel was built in 1849; she is of about 120 tons burden, new measurement, and has a bell for a fog-signal. She has remained on her station during the year and received needed supplies and fitments.

Relief light-vessel, No. 9.—This wooden vessel was built in 1867, is of about 103 tons burden, new measurement, and has a bell for a fog-

signal. On August 15, 1906, she was placed on Pollock Rip Shoals light-vessel station, and on September 18 was withdrawn. On May 7, 1907, she was placed on Pollock Rip light-vessel station until June 1, while light-vessel No. 47 was under repair.

DAY AND UNLIGHTED BEACONS.

These are generally in good condition.

FOG-SIGNALS OPERATED BY ENGINES.

92–93. Cape Ann, Massachusetts.—This 10-inch steam whistle was in operation some 812 hours and consumed about 56 tons of coal.

94. Eastern Point, Massachusetts.—This 4,000-pound fog-bell was in operation about 647 hours, and some 199 gallons of mineral oil were used in running the small steam engine which operates the bell striker.

No. 125. Boston light-vessel, No. 54, Massachusetts.—This 12-inch chime whistle was in operation about 870 hours and consumed some 136 tons of coal.

No. 110. The Graves, Massachusetts.—This first-class Daboll trumpet was in operation about 876 hours, and some 900 gallons of mineral oil were used in running the operating engine.

128–129. Boston, Mass.—This first-class steam siren was in operation some 824 hours and consumed about 44 tons of coal.

137. Race Point, Massachusetts.—This first-class Daboll trumpet was in operation some 204 hours and consumed about 59 gallons of mineral oil in running the operating engine.

143. Cape Cod, Massachusetts.—This first-class Daboll trumpet was in operation about 1,020 hours and consumed some 512 gallons of mineral oil in running the operating engine.

149. Pollock Rip Shoals light-vessel, No. 73, Massachusetts.—This 12-inch steam chime whistle was in operation about 1,361 hours and consumed some 231 tons of coal.

151. Pollock Rip light-vessel, No. 47, Massachusetts.—This 12-inch steam chime whistle was in operation about 1,367 hours and consumed some 110 tons of coal.

157. Great Round Shoal light-vessel, No. 42, Massachusetts.—This 10-inch whistle, operated by compressed air, was in operation some 1,356 hours, and about 5,330 gallons of mineral oil were used by the engine.

160. Nantucket Shoals light-vessel, No. 66, Massachusetts.—This 12-inch steam whistle was in operation about 1,134 hours, and some 201 tons of coal were consumed.

180. West Chop, Massachusetts.—This 10-inch steam whistle was in operation about 1,006 hours, and consumed some 61 tons of coal.

188. Vineyard Sound light-vessel, No. 41, Massachusetts.—This 12-inch steam whistle was in operation about 983 hours, and consumed some 89 tons of coal.

191. Dumpling Rock, Massachusetts.—This first-class Daboll trumpet was in operation some 786 hours, and about 837 gallons of mineral oil were used by the engine.

BUOYAGE.

The buoyage of this district is in good condition.

LIGHT-HOUSE DEPOTS.

The articles kept on hand at these stations include buoys and their appendages, fuel, oil, anchors, chains, paints, cordage, and such other miscellaneous articles as may be found necessary for issue to tenders, light-vessels, and light-stations.

Woods Hole, Massachusetts.—This is used as a base of supplies for the southern part of the district, which includes the coast line between Cape Cod and Westport. A sewer about 170 feet long was laid, a veranda was built on the south side of the dwelling, and minor repairs were made.

Lovells Island, Boston Harbor, Massachusetts.—This is used as a base of supplies for the northern part of the district, which takes in the coast line from Cape Cod to Salisbury Beach. It is in a deplorable condition, as but slight expenditures were made for several years to repair the wharf, storehouse, or dwelling of the custodian, because this site is needed for fortification purposes. The wharf, on which are stored spare buoys, buoy sinkers, etc., is in a dangerous state, although temporary repairs were made to the wharf, coal shed, storehouse, and dwelling.

The following statement made in the Board's last three annual reports is renewed:

This depot, used for storage of buoys and appendages, light-vessel chain, fuel, oil, and supplies for use in the northern part of the district, from Provincetown to Newburyport, Mass., is in a deplorable condition. The wharf is not safe and the coal shed is more or less unserviceable, the floors being undermined by heavy extra high tides, and are falling in.

The act approved on June 28, 1902, appropriated $25,000 for establishing a light-house depot for the Second light-house district at Castle Island. The act of February 24, 1903, repealed the act of June 28, 1902, and provided that the Secretary of the Treasury be authorized and directed to locate and establish a light-house depot for the Second light-house district in Boston Harbor, Massachusetts, on land owned by the United States, at a cost not to exceed $25,000. The act approved on February 24, 1903, which authorized and directed the establishment of this light-house depot at a cost not to exceed $25,000, made no appropriation for that purpose. The Secretary of the Treasury has not yet located the site on land belonging to the United States, as directed by this act. Extended repairs and improvements are required at the Lovells Island light-house depot, and it is estimated that it would cost $11,500 to put it in good condition; but this site must soon be abandoned, it being required by the War Department.

The following recommendation made in the Board's last annual report is renewed:

"Lovells Island light-house depot is in a more or less unserviceable condition. The need for a proper place to store the buoys and accessories to relieve the floating aids to navigation in Boston Harbor is great, and it is becoming greater day by day. When the possession of Lovells Island depot, which is now partly out of use, is entirely resumed by the War Department the Board will have no place to store buoys, mooring tackle for its light-vessels, oil, and other supplies for its light-houses in the Second light-house district, except at Woods Hole depot, which is so far distant from Boston that it will make the keeping of the aids to navigation in Boston Harbor and Boston Bay exceedingly difficult. The large commerce going in and out of Boston will feel to a great extent this lack of facilities on the part of the Light-House Board. The Board therefore recommends that the proper measures be taken to locate a site for a

light-house depot in Boston Harbor and that due appropriation be made for its establishment.

"It is impracticable for the Board at this time to submit an estimate of the cost of the establishment of such a depot, as its site has not yet been decided upon, and upon the position of the site, as to its relation to deep water, to which a pier will have to be built, will largely depend the amount of the appropriation required."

This depot, which is used for storage of buoys and appendages, light-vessel chain, fuel, oil, and supplies for the northern part of the district from Provincetown to Newburyport, Mass., is in even worse condition than was reported a year ago. The wharf is unsafe and the coal shed is unserviceable. The wharf is so much used by the War Department's vessels, unloading materials for fortifications, etc., that a long delay is sometimes necessary before the tender can make the wharf to load and unload buoys or supplies.

TENDERS.

Mayflower.—This vessel, which was launched in 1897, is a twin-screw steel steamer of 572 gross tons. She delivered to light-stations 19,675 gallons of mineral oil, 324 loads of rations and stores, 44 cords of wood, and 540 tons of coal. She inspected 147 stations and vessels and was at the Lovells Island light-house depot for 36 days and was laid up for repairs for 40 days. She changed or replaced 471 buoys, painted 195 buoys and 6 beacons, marked 1 wreck, refilled 9 gas buoys and established 8 buoys, and was engaged in towing light-vessels 4 days. In the discharge of these duties she steamed about 11,467 miles and consumed some 1,533 tons of coal, and was 272 days under steam. She was under repair from December 13, 1906, until January 19, 1907. On February 18, while lying at the wharf at Lovells Island depot, she was run into by a schooner. The damage inflicted was repaired at the expense of the owner of the schooner. On March 18 she was further repaired. She received during the year necessary fitments and supplies.

Verbena.—This wooden side-wheel steamer of about 294 tons was built in 1870. She delivered to stations 225 gallons of mineral oil, 222 loads of supplies, 62 cords of wood, and 233 tons of coal. She was on inspection duty for 26 days and inspected 142 stations and vessels, and she was at Woods Hole light-house depot for 51 days. She changed or replaced 294 buoys, painted 63 buoys and 10 beacons, marked 3 wrecks, and established 5 buoys. She was under repairs for 35 days. She steamed about 8,309 miles and consumed some 950 tons of coal while under steam for 325 days. On January 8, 1907, she was put under repair, which was completed on February 7, 1907, when her boilers and hull were examined by the United States local inspectors. She received necessary fitments and supplies.

Azalea.—This vessel, launched in 1891, is a steel screw steamer of 423 tons. She delivered to light-stations and vessels 33,220 gallons of mineral oil, 270 loads of supplies, 8 cords of wood, and 912 tons of coal. She was employed on inspection for 19 days and inspected 14 stations and vessels, and was at Woods Hole light-house depot for 96 days. She changed or replaced 158 buoys, painted 78 buoys and 2 beacons, refilled 9 gas buoys, was laid up for repairs 33 days, and was engaged in towing light-vessels for 23 days. She made 13 trips from New Bedford to Nantucket Shoals light-vessel. In the discharge of

these duties she steamed about 13,782 miles and consumed some 790 tons of coal. She was under steam for 365 days. On February 9, 1907, she was repaired. She has received needed fitments, repairs, and supplies.

Myrtle.—This wooden screw steamer was built in 1872, and is of about 348 tons gross burden. She steamed about 9,470 miles and consumed some 864 tons of coal, and, except when laid up for repairs, was continuously occupied in delivering materials at stations. Her machinery was repaired. When the *Myrtle* was built, she was well adapted to the needs of the two districts in which she served, but in the thirty-five years she has been in commission these needs have greatly increased. The storage capacity of the vessel, which had been considerably reduced by the installation of additional machinery and necessary modern appliances and by the extension of her deck houses and lessening of space in the forehold to provide accommodations for the increase in the number of officers and crew, is inadequate for the demands now made on her.

New tender for construction and repairs.—The *Myrtle*, the only tender at the disposal of the engineer of the First and Second light-house districts, was built in 1872. Her storage capacity was much reduced by the installment of additional machinery and needed modern appliances, and by the extension of her deck houses and the lessening of space in her forehold to provide for accommodations for the increased number from 14 to 19 of officers and crew. Hence she is inadequate for the demands now made on her. For the prompt, efficient, and economical dispatch of work, a new, larger, and more commodious tender is needed. It is estimated that such a tender can be built for not exceeding $200,000, and the Board recommends that an appropriation of that amount be made therefor.

THIRD DISTRICT.

This district extends from Elisha Ledge, off Warren Point, Rhode Island, to a point on the coast of New Jersey opposite Shrewsbury Rocks, and includes the ledge and the rocks. It embraces all aids to navigation on the coast of Rhode Island, Connecticut, and New York, and of New Jersey northward to a point opposite Shrewsbury Rocks, and all tidal waters tributary to the sea or Long Island Sound between the limits named, together with the aids on Whitehall Narrows and on the United States waters of Lakes Champlain and Memphremagog.

It also includes the light-house service of Porto Rico and the adjacent islands, the waters of the islands lying east of the seventy-fourth meridian of longitude west of Greenwich which were ceded to the United States by the Government of Spain by treaty entered into on December 10, 1898, and the lighting and buoyage of Guantanamo Bay, Cuba, until May 1, 1905, when Guantanamo was transferred to the Seventh light-house district.

Inspector.—Capt. John A. Rodgers, U. S. Navy.

Engineer.—Lieut. Col. William T. Rossell, Corps of Engineers, U. S. Army, to August 13, 1906; since then Maj. Charles L. Potter, Corps of Engineers, U. S. Army.

There are in this district:

Light-houses and beacon lights, including 102 post lights	289
Light-houses and beacon lights in Porto Rico	24
Light-vessels in position	7
Light-vessels for relief	3
Day, or unlighted, beacons	43
Fog-signals operated by steam, caloric, or oil engines	31
Fog-signals operated by clockwork	67
Gas-lighted buoys	34
Whistling buoys in position	7
Bell buoys in position	40
Other buoys in position	685
Steamer *Armeria*, used for supplying the light-stations of the Atlantic and Gulf coasts	1
Steamers *Larkspur*, *John Rodgers*, and *Cactus*, buoy tenders, and for supply and inspection of light-stations	3
Steamer *Gardenia*, buoy tender, and for freight	1
Steamers *Mistletoe* and *Iris*, used for works of construction and repair of light-stations, fog-signals, and day beacons	2
Steam launch *Daisy*, for supply and inspection of lights and buoy service on Lake Champlain and for light freight and work in New York Bay	1
Steam launch *Nettle*, for work of construction and repair on Lake Champlain	1

CHANGE OF ILLUMINANT—INCANDESCENT OIL VAPOR.

The use of this vapor as an illuminant is being extended gradually to the stations in this district.

The plant at each station consists, in short, of one high-pressure air tank, with reducing valve attached, and gauge; one oil-and-air tank, with connections to the lamp; tubing through which the oil is forced from the tank to the burner; a spirit lamp for the initial heating of the oil to the vapor point, after which it is heated by the flame; the mantle and burner, and the implements required to clean, adjust, and repair the different parts. The lamp includes vaporizer, Bunsen burner, and the mantle. Each station is furnished with two of these lamps.

After instructions by a lampist, sent from the shop at the general depot, an intelligent keeper readily acquires the skill to use the plant and exhibit and care for the light.

At the present stage of experience with this vapor illuminant it requires more constant watching than the oil lights, but with the improvements to come with experiment, it will be probably as little liable as the latter to be extinguished by defects of mechanism or supply.

The incandescent oil vapor is used at each of the following-named light-stations:

First order.—Block Island Southeast and Shinnecock Bay.
Second order.—Little Gull Island.
Third order.—Sandy Hook (rear), Eatons Neck, and Horton Point.
Fourth order.—Great Captain Island, Point Judith, and Block Island North.
Range lights.—Point Comfort, Conover, Chapel Hill, Elm Tree, and New Dorp beacons.

The relative consumption of oil of the old and new lamps is shown in the following table:

	Oil lamp.		Vapor lamp.		Proportion.
	Size.	Consumption per hour.	Size.[a]	Consumption per hour.	
	Wick.	*Gills.*	*Mm.*	*Gills.*	*Per cent.*
First order	5	16.0	55	4.2	26¼
Second and third order	3	4.8	55	4.2	87½
Third order	2	2.0	55	4.2	210
Fourth order	1	1.7	34	2.2	130
Range	.....	1.1	34	2.2	200

[a] 55 and 34 mm. refer to the diameter of the mantle used or the width of the light; the 55 mm. is used in all lights of third order or larger and the 34 mm. is used in lights of the fourth order.

Taking the stations by name, the annual allowance of oil is as follows:

Station.	Old light.	New light.	Station.	Old light.	New light.
	Gallons.	*Gallons.*		*Gallons.*	*Gallons.*
Shinnecock, first order	2,282	599	Point Judith, fourth order	243	313
Block Island Southeast, first order	2,282	599	Block Island North, fourth order	243	313
Little Gull Island, second order	685	599	Point Comfort beacon	155	313
Sandy Hook, third order	286	599	Conover beacon	155	313
Eatons Neck, third order	286	599	Chapel Hill beacon	155	313
Horton Point, third order	286	599	Elm Tree beacon	155	313
Great Captains Island, fourth order	243	313	New Dorp beacon	155	313
			Total	7,611	6,098

A saving is shown of 1,513 gallons in the annual supply of oil necessary for the 14 lights installed. For the first, second, and 3-wick third orders the consumption of oil is reduced; for the lower orders it is increased.

The resulting candlepower of lights compared with the old lights are as follows:

Light and station.	Old light.	New light.	Increase.
	Candlepower.	*Candlepower.*	*Times.*
First-order (5-wick) fixed: Block Island Southeast and Shinnecock	12,188	45,690	3.76
Second-order (3-wick) fixed: Little Gull Island	4,325	33,440	7.59
Third-order (3-wick) fixed: None in district	2,937	22,720	7.3
Third-order (2-wick) fixed: Sandy Hook, Eatons Neck, and Horton Point	1,782	22,720	12.2
Fourth-order fixed: Block Island North and Great Captains Island	475	4,308	9.1
Fourth-order (4-panel) flashing: Point Judith	6,000	75,048	12.5
Range lenses: Point Comfort, Conover, Chapel Hill, Elm Tree, and New Dorp beacons	4,000	60,000	15.0

With the vapor lamp must be counted the cost of the mantles and alcohol to start the light, and with the old lamp must be counted the cost of chimneys and wicks. It is at present, from available data, impossible even to approximate these costs for the new lamp, but probably they would be considerably in favor of the old lamp. Considering them the same and counting the cost of oil only, we have the following candlepowers per gill per hour, which shows the relative efficiency of the two lights:

Order of light.	Old.	New.	Increase.
	Candlepower.	*Candlepower.*	*Times.*
First-order (5-wick)	761	10,878	14.29
Second-order (3-wick)	901	7,961	8.83
Third-order (3-wick)	611	5,410	8.85
Third-order (2-wick)	891	5,410	6.07
Fourth-order (1-wick)	279	1,958	7.02
Fourth-order (1-wick) Four-panel flashing	3,529	34,113	9.67
Range lens	3,636	27,272	7.5

This shows, cost for cost, an increased candlepower efficiency of 6 to 14 times in using the oil vapor instead of the old oil lamp with wicks.

LIGHT-STATIONS.

The Dumplings, off Bull Point, Conanicut Island, west side of Eastern Passage, Narragansett Bay, Rhode Island.—A fog-signal is much needed here. That need was emphasized in February last by the stranding of a freight steamer there in a dense fog, though handled by experienced and trustworthy navigators. The Dumplings are three large rocks, on one of which it is proposed to place the fog-signal. It is estimated that this can be done at a cost not exceeding $10,000, and the Board recommends that an appropriation of this amount be made therefor.

206. Rose Island, Narragansett Bay, Rhode Island.—This beacon, which had been carried away, has been rebuilt.

209. Prudence Island, Rhode Island.—A boundary-line fence was built.

217. Plum Beach, Rhode Island.—The following recommendation, made in the Board's last eight annual reports, is renewed:

It is estimated that a fog-signal could be established at a cost of $1,343, and it is recommended that an appropriation of this amount be made therefor.

219. Conanicut Island, Rhode Island.—Moved old fog-signal house. A brick fog-signal house and a brick engine house were built, and the fog-signal apparatus was installed.

230. Point Judith, Rhode Island.—On January 2, 1907, a new fourth-order lens and vapor lamp were installed. The intensity of the light was increased by changing the illuminating apparatus and the illuminant from oil to incandescent oil vapor. Various repairs were made.

232. Block Island North, Block Island Sound, Rhode Island.—On February 12, 1907, the intensity of the light was increased by changing the illuminant from oil to incandescent oil vapor.

235. Block Island Southeast, Block Island, Rhode Island.—On February 12, 1907, the intensity of the light was increased by changing the illuminant from oil to incandescent oil vapor.

269. Little Gull Island, Long Island Sound, New York.—On February 19, 1907, the intensity of the light was increased by changing the illuminant from oil to incandescent oil vapor.

274. Cedar Island, New York.—On June 14, 1906, contract was made for delivering 2,000 tons of riprap stone, and in September 1906, the work was completed.

336. Black Rock, Connecticut.—Some 229 feet of picket fence and 362 running feet of plank walk were built. Various repairs were made.

246. Southwest Ledge, Connecticut.—The act approved on March 4, 1907, authorized the Board to enter into a contract for completing Southwest Ledge light-station, Connecticut, at a total cost not exceeding $115,000, including the sum of $60,000 made available by the act approved on June 20, 1906, appropriated by the act approved on April 28, 1904, for a light and fog-signal at Black Ledge, New London, Conn. The Board therefore recommends that an appropriation of $55,000 be made to satisfy this contract. The plans for this work are being made.

345. Eatons Neck, New York.—On February 28, 1907, the intensity of the light was increased by changing the illuminant from oil to incandescent oil vapor. Various repairs were made.

347. Huntington and Lloyd harbors, New York.—The (deficiency) act approved on March 4, 1907, appropriated $40,000 for a light and fog-signal station at the entrance to Huntington Harbor and Lloyd Harbor, New York. The plans for this work are under consideration.

360. Execution Rocks, Long Island Sound, New York.—A horizontal band was placed on the southeasterly front of the station and a horizontal band on the fence on the westerly front of the station.

364. Throgs Neck, Long Island Sound, New York.—This light was, on July 25, 1906, changed from a fifth-order, shown from an iron skeleton tower, to a fourth-order light, shown from a conical red brick tower.

—. *Negro Point on Wards Island, Hell Gate, East River, New York.*—A light and fog-signal is much needed by the commerce passing through Hell Gate at this point. The Board estimates that the station can be established at an expense not exceeding $10,000, and it recommends that an appropriation of that amount be made therefor. Title to site for this light-house is in part secured.

419 and 388. Staten Island light-house (Ambrose channel outer range), New York Harbor, New York.—The act approved on June 20, 1906, authorized the establishing of a light-house (rear) on Staten Island, New York, and raising West Bank light (front) at a cost not exceeding $100,000, and the act approved June 30, 1906, appropriated $50,000 therefor. Plans and specifications are being made for doing that work on this basis. The Board therefore renews its recommendation for an appropriation of $50,000 more in order to satisfy this authorization.

371. South Brother Island Ledge, East River, New York.—This light was discontinued on February 7, 1907, as the structure was overturned by ice. It was rebuilt on March 29, 1907, when it was relighted.

378. Shinnecock Bay, New York.—On February 19, 1907, the intensity of the light was increased by changing the illuminant from oil to incandescent oil vapor.

408. Sandy Hook (rear), Sandy Hook, New Jersey.—On November 15, 1906, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor.

410. North Hook beacon, Sandy Hook, New Jersey.—On June 15, 1907, the red sector in this light was discontinued.

412. Point Comfort beacon, Sandy Hook, New Jersey.—On January 10, 1907, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor.

—. *Hunts Point, East River, New York.*—The following is a copy of a letter dated March 5, 1902, from the Secretary of the Treasury to the Speaker of the House of Representatives:

This Department has the honor to state, at the instance of the Light-House Board, that the interests of commerce plying through the East River and Long Island Sound demand the establishment of a light and fog-signal at Hunts Point, New York.

This point of land is situated between Hell Gate and Whitestone, N. Y., extends for a considerable distance into East River, and is dangerously deceiving to navigators at night and during foggy weather. Vessels are now, in approaching New York, often obliged to remain to the eastward of this point to await the clearing of fog in order that they may make with certainty the turn which they must take there preparatory to running to North Brother Island and through Hell Gate. A turn is made at Hunts Point by vessels going either east or west, and it is the point from which all steamers take their departure.

Many large commercial companies have joined in urging that a light and fog-signal be established at Hunts Point and have submitted to the Light-House Board numerous letters from masters of vessels frequently navigating Long Island Sound, all of which are emphatic in advocating this measure.

The Light-House Board at its session on March 3, 1902, considered this matter, and concluded that a light and fog-signal is much needed at Hunts Point, New York, to protect the important passing commerce and that these aids to navigation ought to be established. The Board estimates that a site can be purchased and a suitable structure erected thereon, provided with the necessary light and fog-signal apparatus, at a cost not to exceed $5,000.

This Department concurs with the Board in deeming the establishment of this proposed light and fog-signal necessary, and therefore has the honor to recommend that an appropriation of $5,000 be made therefor.

415. Conover beacon, Sandy Hook Bay, New Jersey.—On January 20, 1907, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor.

416. Chapel Hill beacon, Sandy Hook Bay, New Jersey.—On January 20, 1907, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor. Various repairs were made.

420. Elm Tree beacon, Staten Island, New York.—On December 31, 1906, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor.

421. New Dorp beacon, Staten Island, New York.—On December 31, 1906, the intensity of this light was increased by changing the illuminant from mineral oil to incandescent oil vapor.

429. Governors Island, New York.—A brown-stone fog-signal building was on January 23, 1907, added to the station.

449. Jeffreys Hook, Hudson River, New York.—The following statement and recommendation, made in the Board's last three annual reports and previous reports, is renewed:

Permission has been obtained from the department of public parks of New York City to occupy the necessary site for a fog-signal and a more powerful light, which are urgently needed at this point. The estimated cost of establishing the proposed light and fog-signal is $1,400.

The following recommendation, which was made in the Board's last ten annual reports, is renewed:

"A larger light and a fog bell here would be valuable aids to navigation. The point extends well out into the river, with deep water close to its outer end. The usual route of steamers passing up or down the river is close to the point. The present post light should be replaced by a new structure, upon which should be the lantern with the bell below.

"It is estimated that these can be established for not exceeding $1,400, and it is recommended that an appropriation of this amount be made therefor."

The above estimate was made some eleven years ago. Conditions have changed since then. The establishment of a fog-signal at this station will require the erection of a keeper's dwelling, as the efficiency of a fog-signal is necessarily impaired when the keeper is not living at the station. It is estimated that $3,400 will be sufficient for the erection of a fog-signal and dwelling upon the site which it is proposed to obtain from the city of New York. The Board therefore recommends that an appropriation of $3,400 be made therefor.

447. Passaic, Newark Bay, New Jersey.—The act approved on March 4, 1907, appropriated $15,000 for a light and fog-signal at or near the west end of the draw, near the Lehigh Valley Railroad bridge. The work will be done as soon as practicable.

454. Iona Island, Hudson River, New York.—The following recommendation, made in the Board's last eleven annual reports, is renewed:

The post light at this station is of no service during thick weather. A fog-signal is needed during fog, in addition to the light, by the important commerce of this river. It is estimated that a fog-signal can be established here for a sum not exceeding $1,200, and it is recommended that an appropriation of this amount be made therefor.

This estimate was made some ten years ago, since which time the cost of labor and material has been largely increased. In addition to this, as it is necessary to erect a small dwelling for the keeper who is to take care of the fog-signal plant, the Board estimates that it will

cost $2,000 to do what is required at this station, and it therefore recommends that an appropriation of that amount be made therefor.

479. Coxsackie, N. Y.—On July 31, 1906, some 1,465 tons of riprap were delivered here, and by November, 1906, 1,520 tons were delivered.

2. Whipple Point, Lake Memphremagog, Vermont.—On March 29, 1907, the contract for the thorough repair of this station was completed.

DAY OR UNLIGHTED BEACONS.

Halfway Rock, Narragansett Bay, Rhode Island.—A spindle surmounted by a barrel. In good condition. Fitted new barrel.

Spindle Rock beacon, entrance to Greenwich Bay, Rhode Island.—An iron spindle surmounted by a barrel. A new barrel was furnished and the spindle is now in good condition.

Ram Island Reef beacon, Fishers Island Sound, Connecticut.—An iron spindle with a round red cage. The beacon was rebuilt and is now in good condition.

Groton Long Point Reef beacon, Fishers Island Sound, Connecticut.—The beacon, an iron spindle with a cage in the form of an inverted cone, was rebuilt.

The other day-beacons are in good condition.

LIGHT-VESSELS.

199. Brenton Reef light-vessel, No. 39, entrance to Narragansett Bay, Rhode Island.—This wooden vessel was built in 1875; her gross burden is 387 tons, and she has a two-whistle fog-signal. She is equipped with a submarine signal bell, which sounds the number 39 when in operation. She was withdrawn for repairs on June 17, 1907, and was on July 17, 1907, returned to her station, where she remained during the rest of the fiscal year. She received needed fitments, repairs, and supplies.

243. Ram Island light-vessel, No. 23, Fishers Island Sound, New York.—This wooden vessel was built in 1857, is of 186 tons gross burden, and has a bell fog-signal. She was on duty during the entire year. She received needed repairs, fitments, and supplies; also minor repairs were made by the crew.

267. Bartlett Reef light-vessel, No. 13, off New London, Long Island Sound, Connecticut.—This wooden vessel was built in 1854, and is of 155 gross tons. She has a bell fog-signal. She was not off her station during the year. She received needed fitments, supplies, and minor repairs, which were made by the crew.

317. Cornfield Point light-vessel, No. 48, off the mouth of the Connecticut River, Long Island Sound, Connecticut.—This composite vessel was built in 1890–91, is of 295 tons gross burden, and has a steam whistle fog-signal. A flashing white light is shown from her foremast, and a fixed red light is shown from her mainmast. She was withdrawn for repairs on October 10, 1906, and was returned to her station on November 14, 1906. She was again withdrawn on April 26, 1907, and was returned to her station on June 17, 1907. She was on duty during the rest of the fiscal year. This vessel is equipped with a submarine signal bell, sounding the number 48 when operated. She received necessary fitments, supplies, and repairs.

These repairs, due chiefly to collisions of two schooners on April 26, 1907, were made at the general light-house depot.

380. Fire Island light-vessel, No. 68, off Fire Island, Atlantic coast of Long Island, New York.—This composite steam light-vessel was built in 1897, and is of 408 tons gross burden. Her lights are electric fixed white, and one is shown from each masthead, and her fog-signal is a steam chime whistle. This vessel is equipped with a submarine signal bell, sounding the number 68 when operated. She was withdrawn for repairs on July 30, 1906, and was returned to her station on August 28, 1906. She was again withdrawn for repairs on April 1, 1907, and on July 11, 1907, was returned to her station. She was on her station during the rest of the year. The light-vessel went under her own steam to the Brooklyn Navy-Yard on April 23, 1907, where she was thoroughly repaired, returning on July 6 to the general light-house depot.

387. Ambrose Channel light-vessel, No. 87, entrance to New York Harbor, New York.—The act approved on June 30, 1906, appropriated $50,000 toward the construction of a light-vessel for the sea entrance to Ambrose channel and authorized a contract not exceeding $115,000 therefor. The act approved on March 4, 1907, appropriated $65,000, thus completing the balance required. Contract has been made for the building of this vessel within twelve months.

394. Junction tank light-vessel, Ambrose channel, at the junction of the east and main ship channels, New York Harbor, New York.—The act approved June 30, 1906, appropriated $15,000 for a tank light-vessel for this channel. Plans and specifications for this vessel were made. She will be built as soon as practicable.

395. Sandy Hook light-vessel, No. 51, off the entrance to New York Bay.—This steel, steam, self-propelling light-vessel was built in 1892, and is of 283 tons gross burden. Her light is electric fixed white with eclipses, and her fog-signal is a 12-inch steam whistle. This vessel is equipped with a submarine signal bell, sounds the number 22 when operated. She was off her station from June 9, 1906, until July 25, 1906, when she was replaced. She was on her station during the rest of the year. She received needed fitments, supplies, and repairs.

398. Scotland light-vessel, No. 11, off the entrance to New York Bay, and seacoast of New Jersey.—This wooden vessel was built in 1853, is of 320 tons gross burden, and her fog-signal is a bell. She was on duty during the year. She received needed fitments, supplies, and repairs.

Relief light-vessel, No. 78.—This first-class, steel, steam light-vessel is of 621 tons displacement and her fog-signal is a 12-inch steam whistle. She was on station at Sandy Hook from June 9 to July 25, 1906; at Fire Island from July 30 to August 28, 1906; at Cornfield Point from October 10 to November 14, 1906; at Nantucket Shoals from November 21, 1906, to January 2, 1907, and at Fire Island from April 1 to July 11, 1907. She is equipped with a submarine signal bell sounding the number of the station on which for the time being she is placed, and also with wireless telegraphic apparatus, which is worked by operators placed on board by the Navy Department.

Relief light-vessel, No. 16.—This wooden vessel was built in 1854, is of 250 tons gross burden, and has a compressed-air fog-signal. She was on duty at Northeast End, New Jersey, from June 8 to August 1, 1906; at Winter-Quarter Shoal from August 2 to September 15, 1906;

at Fenwick Island station from September 19 to October 23, 1906; at Cornfield Point from April 26 to June 17, 1907, and at Brenton Reef, off Newport, R. I., from June 18 to July 17, 1907. She received needed supplies, fitments, and repairs.

Relief light-vessel, No. 20.—This wooden vessel was built in 1867, is of 105 tons gross burden, and has a bell fog-signal. She is kept ready for duty as a relief ship. She received needed supplies, fitments, and repairs.

Relief light-vessel, No. 53.—On receipt of a wireless message from the steamship *Campania* that light-vessel No. 53 was about 2 miles off Sandy Hook and in need of assistance, the tender *Gardenia* was sent to her aid, and on January 20, 1907, brought her to the general light-house depot. At the time of her mishap she was on her way from the Second light-house district to take station as relief light-vessel off Charleston, S. C. Her disabled engine was repaired and on January 27 she left the general light-house depot under her own steam.

FOG-SIGNALS OPERATED BY ENGINES.

199. Brenton Reef light-vessel, No. 39, Rhode Island.—The two steam whistles, 12 and 6 inch, were in operation about 671 hours, and consumed some 136 tons of coal.

200. Beavertail, Rhode Island.—This first-class compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 597 hours, and consumed some 1,174 gallons of oil.

210. Hog Island Shoal, Rhode Island.—This compressed-air siren, worked by a 2-horsepower oil engine, in duplicate, was in operation about 381 hours, and consumed some 116 gallons of oil.

219. Conanicut Island, Rhode Island.—This compressed-air siren, worked by a 2-horsepower oil engine, in duplicate, was in operation about 651 hours, and consumed some 331 gallons of oil.

221. Warwick, Rhode Island.—This compressed-air siren, worked by a 2-horsepower oil engine, in duplicate, was in operation about 493 hours, and consumed some 145 gallons of oil.

230. Point Judith, Rhode Island.—This first-class compressed-air siren, in duplicate, worked by 16-horsepower oil engines, was in operation about 744 hours, and consumed some 1,503 gallons of oil.

235. Block Island Southeast, Rhode Island.—This first-class compressed-air siren, in duplicate, was in operation about 1,061 hours, and consumed some 1,903 gallons of oil.

237. Great Salt Pond Breakwater Inner End, Rhode Island.—This compressed-air siren, worked by a 2-horsepower oil engine, was in operation about 481 hours, and consumed some 121 gallons of oil.

239. Montauk Point, New York.—This first-class compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 781 hours, and consumed some 1,664 gallons of oil.

248. New London Harbor, Connecticut.—This second-class Daboll trumpet, in duplicate, worked by 13-horsepower oil engines, was in operation about 1,017 hours, and consumed some 1,810 gallons of oil.

268. Race Rock, New York.—This third-class Daboll trumpet, in duplicate, worked by 7½-horsepower oil engines, was in operation about 746 hours, and consumed some 772 gallons of oil.

269. Little Gull Island, New York.—This second-class compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 980 hours, and consumed some 1,745 gallons of oil.

272. Orient Point, New York.—This second-class Daboll trumpet, worked by a 2-horsepower oil engine, in duplicate, was in operation about 461 hours, and consumed some 161 gallons of oil.

317. Cornfield Point light-vessel, No. 48, Connecticut.—This 12-inch steam whistle was in operation about 828 hours, and consumed some 156 tons of coal.

320. Falkner Island, Connecticut.—This first-class compressed-air siren, in duplicate, worked by 16-horsepower oil engines, was in operation about 610 hours, and consumed some 1,446 gallons of oil.

322. Southwest Ledge, Connecticut.—This second-class Daboll trumpet, in duplicate, worked by 3½-horsepower oil engines, was in operation about 480 hours, and consumed some 250 gallons of oil.

325. New Haven Outer Breakwater, Connecticut.—This compressed-air siren, in duplicate, worked by 2-horsepower oil engines, was in operation about 525 hours, and consumed some 222 gallons of oil.

330. Stratford Shoal (Middle Ground), New York.—This third-class Daboll trumpet, in duplicate, worked by 3½-horsepower oil engines, was in operation about 590 hours, and consumed some 238 gallons of oil.

337. Penfield Reef, Connecticut.—This third-class Daboll trumpet, worked by 3½-horsepower oil engines, in duplicate, was in operation about 446 hours, and consumed some 216 gallons of oil.

338. Pecks Ledge, Connecticut.—This compressed-air siren was in operation about 269 hours, and consumed some 100 gallons of oil.

344. Greens Ledge, Connecticut.—This third-class Daboll trumpet, worked by 5-horsepower oil engines, in duplicate, was in operation about 406 hours, and consumed some 260 gallons of oil.

345. Eatons Neck, New York.—This first-class automatic compressed-air siren, in duplicate, worked by 13-horsepower engines, was in operation about 580 hours, and consumed some 1,160 gallons of oil.

353. Great Captain Island, New York.—This first-class automatic compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 489 hours, and consumed some 915 gallons of oil.

360.—Execution Rocks, New York.—This first-class automatic compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 414 hours, and consumed some 965 gallons of oil.

380. Fire Island light-vessel, No. 68, New York.—This 12-inch steam chime whistle was in operation about 469 hours, and consumed some 115 tons of coal.

395. Sandy Hook light-vessel, No. 51, New York.—This 12-inch steam whistle was in operation about 714 hours, and consumed some 225 tons of coal.

410. North Hook Beacon, Sandy Hook, New Jersey.—This first-class automatic compressed-air siren, in duplicate, worked by 13-horsepower oil engines, was in operation about 898 hours, and consumed some 1,939 gallons of oil.

417. Old Orchard Shoal, New York.—This compressed-air siren, worked by 3½-horsepower oil engines, in duplicate, was in operation about 514 hours, and consumed some 208 gallons of oil.

419. West Bank, New York.—This compressed-air siren, worked by a 3½-horsepower oil engine, was in operation about 552 hours, and 633 hours, and consumed some 199 gallons of oil.

427. Robbins Reef, New York.—This compressed-air siren, worked by a 3½-horsepower oil engine, was in operation about 552 hours, and consumed some 274 gallons of oil.

429. Governors Island, New York.—This compressed-air siren, worked by a 2-horsepower oil engine, was in operation about 111 hours, and consumed some 149 gallons of oil.

OILHOUSES.

Oilhouses were built during the year at Falkner Island light-station, Connecticut, and at Shinnecock Bay light-station, New York.

BUOYAGE.

Winter buoyage.—According to custom, between November 30 and December 5, the gas buoys of the district, excepting those in New York Lower Bay, and one buoy in Long Island Sound, were brought in for the season, and on March 19, 1906, were returned to their stations. The excepted buoys were maintained in place during the entire winter. The number of buoys withdrawn was 13, and of those retained, including new buoys, 21, making 34 in all. The weather continued moderate up to the end of December, but early in January, 1907, it became exceptionally cold, and, with short intervals of milder temperature, it remained so until the latter part of April. The 18 iron can, nun, and bell buoys, which the List of Lights, Buoys, and Daymarks of the district designates as replaced by spars in winter, were discontinued for the season between December 19 and 28. The continuous ice fields and gorges caused the lights in the rivers and harbors of the district to be temporarily discontinued for longer or shorter periods between December 4 and April 30, 1907. Exceptional service was rendered by placing gas buoys to mark Ambrose channel and cable buoys in the Lower Bay of New York, and torpedo buoys in Long Island Sound.

Acetylene gas buoys.—Two of the Willson light-ship gas and whistling buoys, each of which is also fitted with a submarine bell, were established—one off Point Judith, Rhode Island, on November 5, 1906, and one at the entrance to Gedney channel, New York Lower Bay, on November 1, 1906, and were placed for experimental purposes. They are valuable aids to navigation, but very expensive. They have not yet been purchased by the Board.

One No 8½ Willson Standard gas buoy was purchased by the Board and is a good aid to navigation. It was established on February 21, 1907, at Southwest Spit, New York Lower Bay.

Whistling buoys, inclosed-tube type.—There are now 7 of them on station in the district.

Gas bell buoy.—This is a combination of the B No. 111, old type, or round-bottom, gas buoy and a bell without outside clappers placed beneath the lantern. This old type of buoy is alone of the gas buoys

susceptible to an efficient application of the bell, the underwater form of the new types tending to prevent lateral movement. Such a combination of gas and bell buoy is useful for a southern climate or in shoal water in summer. The gas bell buoy of this type in Rockaway Inlet, West Way, south side of Long Island, New York, has been in successful operation for three years.

Ambrose channel gas buoys, Ambrose channel, New York Harbor, New York.—The act approved on June 30, 1906, appropriated $43,000 in part "for 13 gas buoys in Ambrose channel."

Gedney and main ship channels gas buoys, New York Bay, New York.—The act approved on June 30, 1906, appropriated $43,000 in part "for 11 gas buoys in the Gedney and main ship channels."

GAS OF THE ACETYLENE-ACETONE ABSORPTION SYSTEM.

This gas is used as an illuminant at Jones Rocks, Corner Stake, South Hook Beacon, and Shrewsbury River lights.

These lights have been operated successfully during the year, except that during the winter months, when the Shrewsbury River was closed to navigation, the lights were discontinued.

LIGHT-HOUSE DEPOTS.

The general light-house depot, Tompkinsville, N. Y.—The act approved on March 4, 1907, appropriated $25,000 for completing the lamp shop at this depot, which, with the appropriation of $50,000 made by the act approved on March 3, 1903, makes $75,000 available for this purpose. The act approved on April 28, 1904, appropriated $17,000 for building a new boathouse, a carpenter shop, a blacksmith shop, and a buoy shed on the north wharf and a watchhouse at the upper and lower gates of the depot. Of these buildings there remain to be erected the boathouse, the carpenter shop, and the buoy shed, and these will be erected when the work at the general light-house depot will permit.

This is the general depot of the Light-House Establishment and also the principal depot of the Third light-house district. The apparatus and supplies for the illumination and maintenance of light-stations on shore and afloat, buoys and appendages, equipment for light-vessels and tenders, fuel and provisions, and tools and implements in general for aids to navigation throughout the Light-House Service are received, stored, packed, and shipped here. The materials in quality, texture, or form are for the most part peculiar to the Service. They are purchased under contract and prepared for shipment to the different depots and for distribution by the local tenders. In previous years the stations on the Atlantic and Gulf coasts from Maine to Texas were served by the supply steamer *Armeria*, but owing to the exigencies of the service this vessel was transferred to the Pacific coast.

That portion of the work of the general light-house depot in the inspector's charge embraces the receiving, storing, and shipping of supplies and cleaning materials, buoys and appendages, ground tackle for light-vessels and tenders, ship chandlery, rations, and fuel; loading and unloading the tenders and freight transports; testing oils, paints, chimneys, and stores of different kinds; repairing tenders

and light-vessels; making and repairing buoys, sails, awnings, lens-lantern covers, keepers' aprons, etc., the repairing, and, in part, the manufacture of buoys and fittings of all kinds.

Under the inspector are the power house and the shops of the carpenter, spar maker, boat builder, and blacksmith; also the fire department of the depot, composed of the workmen of the yard and the crews of the vessels lying at the wharves. The fire engines and the hose connections are kept in condition for immediate use, and the men are organized, equipped, and drilled.

The following-named vessels were repaired at the general light-house depot during the year: The tenders *Gardenia*, *John Rodgers*, *Cactus*, and *Daisy;* Fire Island light-vessel, No. 68; Brenton Reef light-vessel, No. 39; Sandy Hook light-vessel, No. 51; Cornfield Point light-vessel, No. 48; relief light-vessel, No. 78; relief light-vessel, No. 20, and relief light-vessel, No. 16.

The existing carpenter shop and boathouse ought to be replaced by an extension of the present blacksmith shop. The present building is of wood and very old, and while it is not worth repairing, is ill suited to the work required. It is estimated that the extension can be made, together with amount needed for plant machinery, etc., at a cost not exceeding $20,000, and the Board recommends that an appropriation of that amount be made therefor.

The north and south wharves of the present basin need pier extensions as far as the harbor limit will permit, maintaining the present direction of the wharf line. Similar piers now extend out to the line on both sides of the depot, on the north those of the municipality in connection with the city ferry, and on the south the piers of the American Docking Company. It is estimated that these extensions can be made at a cost not exceeding $40,000, and the Board recommends that an appropriation be made therefor.

The existing spar shop ought to be replaced by a new one built near it on the north wharf. The present building is quite old and of wood and is not worth repairing, in consideration of its necessarily exposed site. It is estimated that this shop can be built at a cost of not exceeding $3,000, and the Board recommends that an appropriation of this amount be made therefor.

A wooden dump scow measuring about 80 feet by 30 feet in plan is needed to receive the accumulation of ashes for towing out to sea. Hitherto all this material has been collected in heaps until opportunity offered to load it onto a tender to be dumped in the ocean. The loss of time in loading and unloading occasions serious loss of service of the tenders themselves. It is estimated that a proper dump scow could be built for not exceeding $7,500, and the Board recommends that an appropriation of this amount be made therefor.

The manufacture of iron buoys to a certain extent was undertaken at the general light-house depot after the necessary machinery was installed and the material was procured. The permanent force in the blacksmith shop, aided by boilermakers, temporarily engaged, was employed, and the construction of a few buoys is now in progress.

On the engineer's side is the importation, inspection, storage, preparation, and, in large part, the manufacture and assembling of illuminating and other light-house appliances, some parts of which are not made, or not advantageously procurable, in this country; the manufacture and development of lamps and technical apparatus of

many kinds; the constant endeavor, by test and experiment, to improve the efficiency and reduce the cost of illuminating and fog-signal apparatus; the testing of engines and fog-signals and investigation of new illuminants and methods of illumination, and improvements in the design and application of light-house structures and materials; the preparation of plans and specifications for and works of construction; the repairs of stations, fog-signals, etc., and the procurement and shipment of necessary materials therefor.

In addition to the foregoing, the general work of the depot, consisting in part of the following, has been carried on:

The receipt, preparation, care, and shipment of material, stores, etc., for the general work of this and the various districts; the repairs, alterations, etc., of steamers, fog-signals, light-vessels, and stations, and the machinery and apparatus pertaining thereto; the care of the quarters, shop buildings, fences, and grounds of the depot; the examination and test of illuminating apparatus from and for the various stations and districts and from abroad. The preparation of new, and the repair of old, illuminating apparatus, clocks, revolving machinery, lanterns, lamps, burners, fog-signals, supplies, etc., for this and the other districts; the manufacture and repair of oil supply cans and boxes; the setting up and testing of improved fog-signals, oil and gas engines, gasoline, acetyline, and other apparatus and experiments in connection therewith. The preparation of plans, drawings, and estimates for works and the like.

Dwellings for the assistants to the inspector and engineer of the Third light-house district.—The following recommendation, made in the Board's last three annual reports, is renewed:

The general light-house depot at Staten Island is the general depot for the Light-House Establishment, and also the principal depot for the Third district. The growing needs of the Light-House Establishment in the last thirty years require better arrangements for handling and storing materials, and improvements have been continued systematically since 1888. The value of the supplies and material accumulated there, with their inflammable nature, is such that in case of fire the loss to the Government would be enormous, and the presence on the grounds of at least one officer to act in such emergency is very necessary. The duties of the inspector and engineer often require their simultaneous absence from the depot, and it is with a view of having at all times an authorized person on the grounds that it is proposed to require that the two assistants shall reside on the depot grounds. It is estimated that the cost of dwellings for the two assistants, including furniture and remodeling of the surrounding grounds, will cost not to exceed $20,000, and the Board recommends that an appropriation of this amount be made therefor as a continuation of the annual appropriations for the improvements to Staten Island general light-house depot.

New London, Conn.—The eastern section of the Third light-house district embraces the waters between New Haven and Providence, R. I. From the New London depot and the Goat Island depot, in Newport, R. I., harbor, the needs of the aids to navigation in this section are supplied. The stock of stores at these depots includes light-vessel moorings, buoys and appendages, lime, and fuel. The tender *Cactus* has her headquarters at the New London depot, and light-vessel No. 20 is kept there for the relief of old-type light-vessels. The keeper in charge of this depot takes care of the property and delivers supplies on orders received from the light-house inspector.

Goat Island, Newport Harbor, Rhode Island.—From this depot are furnished supplies for light-vessels and the buoys and appendages used in the vicinity of Narragansett Bay, and here the light-house

tenders working in the neighborhood are coaled. This depot is in charge of the keeper of Newport Harbor light-station.

Juniper Island, Lake Champlain, Vermont.—This depot serves the light-stations and buoys in Lake Champlain. Here is a wharf, and a small storehouse for supplies, building materials, and boats; and the small light-draft tenders when working on Lake Champlain use these facilities.

LIGHT-HOUSE TENDERS.

Armeria.—This steel screw steamer was built in 1889–90, and is of 1,475 tons displacement. Owing to the exigencies of the service it was found necessary by the Light-House Board to transfer this vessel to the Pacific coast. She was outfitted and equipped for the voyage at the general light-house depot, from whence she cleared for San Francisco, on October 24, 1906, arriving at that port on January 8, 1907.

Larkspur.—This steel, twin-screw, seagoing steamer, schooner rigged, was built in 1903, and is of 700 tons displacement. This vessel is equipped experimentally with a sound-receiving apparatus for submarine fog-signals. She changed or replaced 206 buoys, delivered 2,241 packages of supplies, 35,205 gallons of mineral oil, 566 tons of coal, 11½ cords of wood, 9,100 gallons of water, made 9 shipments of freight to other districts, changed and towed light-vessels 11 times, was 82 days on buoy service, 15 days on patrol duty, 41 days on tours of inspection, and worked 83 days at the general light-house depot. In the discharge of her duties she consumed some 1,876 tons of coal, and ran about 15,185 miles. She received necessary fitments, supplies, and repairs.

John Rodgers.—This iron side-wheel steamer was built in 1883, and her gross burden is 260 tons. She was employed on tours of inspection 23 days, on patrol duty 72 days, delivering annual supplies 12 days, in passage 32 days, in transportation of officials 25 days, rebuilding post lights 17 days, in work at the general light-house depot and undergoing repairs 28 days. She delivered to light-stations 865 packages of incidental supplies, 10,000 gallons of mineral oil, 145 tons of coal, and 8 cords of wood. She changed or replaced 242 and painted 193 buoys. She made 29 shipments of freight to the transportation lines, repaired and relighted gas buoys 41 times, relieved them 44 times, and recharged them 110 times. She received and delivered gas buoys and holders at the gas works 28 times, bagged 166 tons of coal at the general light-house depot, recovered 5 sunken bell buoys, brought 3 loads of gravel to the yard, and carried 5 loads of garbage out to sea. In her work she steamed about 9,255 miles and consumed some 953 tons of coal. She received necessary fitments, supplies, and repairs.

Tulip.—The act approved on March 3, 1905, appropriated $50,000 toward constructing, equipping, and outfitting, complete for service, a new light-house and buoy tender, for buoyage, supply, and inspection in this district, the total cost of said tender under contract authorized therefor not to exceed $200,000. The act approved on March 4, 1907, made a further appropriation of $150,000, thus completing the total amount. She is now being built by contract, and is to be finished within the year.

This vessel is a schooner-rigged steel steamer of 900 tons displacement. She measures 190 feet over all, with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion inverted direct-acting engines, driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch by 2 Scotch boilers 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel, and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys which are now being practically tested by the Board.

Cactus.—This wooden side-wheel steamer of 200 tons gross burden was built for the Navy Department in 1863, and was transferred in 1865 to the Light-House Board. She delivered 6,015 cases of mineral oil, 238 tons of coal, 14½ cords of wood, and 745 packages of supplies; changed one light-vessel and replaced 270 buoys; manufactured or repaired 150 buoys and 80 sinkers; moved keepers three days; was at the light-house depot working on buoys, sinkers, repairing boats, and general overhauling of material 94 days. In doing her work she steamed about 9,288 miles and consumed some 638 tons of coal. She received necessary fitments, supplies, and repairs.

Gardenia.—This wooden screw steamer was purchased in 1886, and is of 150 tons gross burden. She relieved or replaced 254 buoys, cleaned and painted 185, recovered 9; buoyed two wrecks; made 42 shipments of freight by various lines of transportation; received 1,256 oil cases shipped from other districts to the general light-house depot, and was employed 36 days changing and replacing light-vessels. She relighted gas buoys 22 times; received and brought 11 buoys from the gas works to the depot; carried holders to be refilled 11 times and returned them 7 times; changed acetylene gas tanks 3 times; repaired 4 acetylene gas buoys, and towed acetylene buoys 3 days. She delivered 600 gallons of mineral oil, 2,450 gallons of water, 190 packages of incidental supplies, 135 tons of coal and 1 cord of wood, and annual supplies to 44 stations; bagged 192 tons of coal; stowed buoys and chains at the depot 38 days; was on patrol duty 47 times; made 25 tours of inspection; towed and changed light-vessels 8 times; was employed building and repairing dolphins and cribs 9 days; moved light-house keepers 2 days; assisted the spar-maker 33 times, and was laid up for repairs 12 days. As a special duty she towed light-vessel No. 53, found disabled at sea, on her way from the Second to the Sixth light-house district. She received necessary fitments, suplies, and repairs. In doing her year's work the *Gardenia* steamed some 10,348 miles and consumed about 620 tons of coal.

Daisy.—This wooden screw steamer was purchased in 1892, and is of about 35 tons gross burden. Her light draft enables her to go through the canal to Lake Champlain, and fits her for service in the kills, small harbors, and other shoal-water inlets. She delivered 12,665 gallons of mineral oil, 1,071 packages of supplies, 22 tons of coal, and made 20 shipments to the different transportation lines. She was employed at the general light-house depot, painting buoys, bagging coal, and helping the work on other tenders 72 days, in

tours of inspection 50 days, and she was laid up for repairs 19 days. She towed and attended light-vessels 8 times, was on patrol duty 6 days, and engaged in transportation of officials 46 days. She delivered 4,385 empty oil cases, received from freight lines, at the general light-house depot, and moved light-house keepers 16 times. She placed or changed 110 and painted 65 buoys, built or repaired 5 post lights, and attended acetylene gas tanks and buoys 27 days. She steamed about 9,114 miles and consumed some 198 tons of coal. She received necessary fitments, supplies, and repairs.

Iris.—This steel screw steamer was built in 1897 and is of 428 tons burden. During the past fiscal year the following repairs were made: From September 22 to October 1, 1906, the tender was under repair. The vessel has rendered valuable service in the inspection, construction, repairs, and maintenance of lights, beacons, signals, and other aids and works of the district, in the performance of which duties she steamed some 820 hours and 9,848 miles, with a consumption of some 892.2 tons of coal. She received the usual fitments and supplies.

Mistletoe.—This wooden side-wheel steamer of 332 tons burden was built in 1872. She was actively employed in the work of inspection, construction, repair, and maintenance of lights, signals, beacons, and other aids; the freighting and shipment of stores, materials, supplies, lens apparatus, and the like. In the performance of these duties she steamed about 1,007 hours and 8,395 miles, with a consumption of about 713 tons of coal. She received needed repairs, fitments, and supplies.

Nettle.—This wooden screw steamer was built in 1878, and is of 18 tons burden. She was employed in the general work of repairs, inspection and maintenance of lights, signals, and other aids in New York Bay and adjacent water, and in Long Island Sound as far east as New London, at points and often in places where a larger vessel could not go, and in the shipment and receipt of stores, apparatus, etc., of this and other districts. She was also engaged 51 days on Lake Champlain in transporting workmen and material. In the performance of these duties she steamed some 675 hours and 4,779 miles, with a consumption of about 111 tons of coal. She received needed repairs, fitments, and supplies.

Woodbine.—Tender for New York Bay and Harbor, Lake Champlain. The act approved on March 4, 1907, appropriated $25,000 for this purpose. Plans for this vessel are being made.

Porto Rican Light-House Establishment.

[Being a part of the Third light-house district.]

On May 1, 1900, the Light-House Board was directed to take charge of the Porto Rican light-house service. The Board, with the approval of the Secretary of the Treasury, at its session of May 7, 1900, ordered that—

> the boundaries of the Third light-house district be extended so as to include within it the island of Porto Rico and the adjacent islands and waters of the islands lying east of the seventy-fourth meridian of longitude west of Greenwich which were ceded to the United States by the Government of Spain by treaty entered into on the 10th day of December, 1898.

Assistant to the inspector of the Third light-house district.—Lieut. Commander Albert N. Wood, U. S. Navy.

Engineer.—Lieut. Col. William T. Rossell, Corps of Engineers, U. S. Army.

In this subdistrict there are:

Light-houses and lighted beacons	24
Whistling buoys in position	1
Bell buoys in position	3
Other buoys in position	55
Steamer *Pansy*, buoy tender, and for supply and inspection, construction, and repair	1

Office and dwelling for the assistant to the inspector.—The following statement, made in the Board's last four annual reports, is renewed:

In December, 1902, the office of the assistant to the light-house inspector was transferred from the United States naval station at San Juan to the custom-house, where it is now located.

An office and dwelling for the assistant to the inspector is much needed. The War Department turned over to the Treasury Department the San Justo bastion, on the Marina at San Juan, to be used as a site for office and quarters for the light-house inspector.

The following recommendation made in the Board's last annual report is renewed:

"It is estimated that a suitable building at this point can be built for $15,000, and the Board recommends that an appropriation of this amount be made therefor."

Porto Rican light-house service.—The last appropriation of $75,000, made by the act approved on March 3, 1905, for maintaining this service, will be soon exhausted. The new tender which will be ready for service in July, 1908, will cost to maintain about $36,000 a year. The cost of maintaining the Porto Rican light-house service has increased as the lights and buoys have increased in number. The Board estimates that it will cost in all about $100,000 to maintain the Porto Rican light-house service for the next fiscal year, and recommends that an appropriation of that amount be made therefor.

1334. Culebrita Island, Porto Rico.—The boathouse was completed by contract. Various repairs were made.

Pansy.—This steel screw steamer of 348 gross tons burden, built in 1878, and loaned from the Seventh light-house district, was employed in delivering supplies and oil, transferring keepers, caring for buoys, and the like. She steamed about 4,061 miles and consumed some 414 tons of coal during the first nine months of the fiscal year. During the last three months, having practically broken down, she was lying at anchor at San Juan. On June 25, 1907, she left there in tow of the United States collier *Caesar* for the Portsmouth, Va., light-house depot, where she arrived on July 3, 1907. It is estimated that it will cost $50,000 to have her put in repair, and it is recommended in another place that an appropriation of that amount be made therefor.

Peoria.—This United States steel fourth-rate vessel of 487 tons displacement, purchased by the War Department and taken over by the Navy, was kindly authorized by the Navy Department on April 16, 1907, to act as a light-house buoy tender in Porto Rican waters, in addition to her other duties, during the absence and disability of the tender *Pansy*, and she has performed and is performing much valuable service.

Orchid.—The act approved on March 4, 1907, appropriated $200,000 for a tender for use in Porto Rican waters and elsewhere, as may be directed. She is now being built under a contract which provides

that she shall be delivered in a year. This vessel is a schooner-rigged steel steamer of 900 tons displacement. She measures 190 feet over all with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple expansion, inverted, direct-acting engines driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch by two Scotch boilers, 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys which are now being practically tested by the Board.

BUOYAGE.

The buoyage of the Third subdistrict is efficient; no new buoys were established during the past fiscal year, nor were any complaints or recommendations received concerning the buoyage.

LIGHT-HOUSE DEPOT.

The following statement, made in the Board's last four annual reports, is renewed:

In June, 1903, the commandant of the naval station needing the storerooms occupied by the Light-House Establishment in the naval station at San Juan, it became necessary to remove all the light-house stores. A suitable building belonging then to the War Department was obtained through the courtesy of the army authorities here, and all the light-house inspector's and light-house engineer's stores were moved into it. The buoys and appendages are still stored in the navy-yard, but the space they occupy may be needed at any time by the Navy. A light-house depot for buoys and appendages and stores has become an urgent necessity. The Board stated in its last annual report:

"The space in the yard allotted for buoys and appendages is ample, but may be needed for the use of the Navy at any time. Land should be secured farther down the bay, a dock built, and a yard, inclosed by a fence, arranged for the accommodation of the buoys and appendages. A storehouse should also be built in conjunction with the yard and dock."

The following recommendation made in the Board's last annual report is renewed:

"It is estimated that these structures can be built for $15,000, and the Board recommends that an appropriation of that amount be made therefor."

At the engineer's office were made plans and sections of test borings made at the depot grounds. The office force also made specifications and received bids for doing work at about seven different light-stations. They also prepared plans and specifications for a road and landing at the proposed light-station at Cabras Island. Proposals for the construction of Cabras Island light-station were prepared and sent out.

Light-house depot grounds.—The temporary buoy shed at the San Juan depot grounds, built by contract, was completed on July 16, 1906. The laying of the water pipe in the San Juan depot grounds, commenced in October, 1906, was completed on November 15. Repairs at the San Juan depot grounds were completed in April, 1907. About 210 running feet of wooden covers were laid over the ditch around the buoy shed. The district carpenter fitted up quarters for the watchmen at the depot.

FOURTH DISTRICT.

This district extends from a point on the coast of New Jersey opposite Shrewsbury Rocks (but does not include the rocks), to and includes Metomkin Inlet, Virginia. It embraces all aids to navigation on the seacoast of New Jersey, Delaware, Maryland, and Virginia, and the tidal waters tributary to the sea between the rocks and the inlet.

Inspector.—Commander Chauncey Thomas, U. S. Navy, to September 30, 1906; since then Commander John E. Craven, U. S. Navy.

Engineer.—Maj. Clement A. F. Flagler, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights, including 8 post lights	76
Light-vessels in position	5
Day, or unlighted, beacons	4
Fog-signals operated by steam, caloric, or oil engines	8
Fog-signals operated by clockwork	8
Gas-lighted buoys in position	7
Whistling buoys in position	4
Bell buoys in position	8
Tall-type can and nun buoys in position	20
Ice buoys in position	38
Other buoys in position	162
Steamer *Sunflower*, buoy tender, and for supply and inspection	1
Steamer *Zizania*, for construction and repair	1
Naphtha launch *Leal*, used for work of construction and repair	1

INSPECTIONS.

Some 302 inspections of light-stations, light-vessels, and post lights were made during the year, and with few exceptions the stations were found in efficient condition as regards care and cleanliness, and the keepers generally attentive to their duties. Edgemoor light-house depot and the tender *Zizania* were regularly inspected, and frequent inspections of the buoys were made.

LIGHT-STATIONS.

499. Sea Girt, seacoast of New Jersey.—A short pile jetty was built by hired labor for the protection of the northeast corner of the reservation. The movable sand fence for the protection of the lawn was erected and kept in position during the winter. Various repairs were made.

500. Barnegat, seacoast of New Jersey.—New sidewalks were laid and various repairs were made.

504. Ludlam Beach, seacoast of New Jersey.—The building was contracted for a concrete sea-wall around the light-house site.

Work was begun in May and by the end of June the excavation was made. The grillage lumber was put in and about 44 per cent of the concrete, and also about one-third of the quantity of reinforcing bars needed. City water was installed in the light-house, and various repairs were made.

508. Cape May, seacoast of New Jersey.—City water was installed and a brick pavement was laid. Minor repairs were made.

514. Harbor of Refuge, Delaware Bay, Delaware.—Contract was made for furnishing the metal work for the substructure of the proposed light-house. The contractors began work in December, 1906, and practically completed it in May, 1907. In June, 1907, it was delivered upon the iron pier at Lewes, Del. Contract was made for constructing the concrete foundation of the proposed light-house. In June, 1907, the contractor commenced the work of excavating in the top of the breakwater. The War Department made no objection to the building of the light-house on the breakwater.

517. Mispillion Creek, Delaware Bay, Delaware.—A change was made in February, 1907, in the position of the red sector of this light, so that its southerly edge indicates the recently dredged channel. Some 8,475 bushels of oyster shells were delivered in May, 1907, for repairing the roadway. The owners of the steamers completed the work of repairing the injury to the sea wall made by those vessels. A row of fender piles was driven in front of the sea wall. Various repairs were made.

520. Miah Maul Shoal, Delaware Bay, Delaware.—During June, 1907, a test boring was made near the center of the 16-foot lump of the Miah Maul Shoal, this being the site for the proposed light-house agreed upon by the district officers. The act approved on March 4, 1907, appropriated $35,000 for the additional sum needed for completing the light and fog-signal at Miah Maul Shoal.

522. Murderkill Creek Range rear, Delaware Bay, Delaware.—A temporary oilhouse was erected in place of the one which was burned down. A new wire hoisting rope was furnished for the lantern post.

523. St. Jones Creek Range front, Delaware Bay, Delaware.—This light was moved out to its original position, about 400 feet from the rear light, on February 20, 1907. A post lantern, with lamp and reservoir, was repaired and sent to the station in place of the one recently burned out.

531. Elbow of Cross Ledge, Delaware Bay, New Jersey.—Contract was made for erecting the foundation of the light-house. The contractors are preparing to begin the work. In January, 1907, the metal work for the foundation of the proposed light-house was unloaded and piled on the river bank at the Christiana light-station. Contract was made for tanks, etc., to be embedded in the concrete foundation of the light-house.

The following is a copy of a part of a letter dated February 13, 1907, from the Department of Commerce and Labor to the Treasury Department:

The sundry civil act of April 28, 1904, appropriated $75,000 for the erection of a light-house and fog-signal on Elbow of Cross Ledge, New Jersey.

Of this amount $21,000 has been expended for the purchase of metal work for the foundation, materials for the substructure, and for the preparation of plans, specifications, and the like. This leaves a balance of $54,000 for further use. Bids have been received for sinking a caisson and erecting the foundation for

this light-station, $45,000 being the lowest. If this bid was accepted the balance of the appropriation would be insufficient to defray the cost of erecting the superstructure and building the light-house. It is estimated that an appropriation of $15,000 additional will be needed for the completion of this light-station.

The Light-House Board therefore recommends, and this Department concurs in the recommendation, that an additional appropriation of $15,000 be made for the completion of the Elbow of Cross Ledge, New Jersey, light-station.

Since the above was written it was found that the sum appropriated is insufficient for the construction. The Board therefore recommends that an additional appropriation of $21,500 be made, $6,500 of which is in addition to the $15,000 recommended in the foregoing paragraph.

533. Joe Flogger Shoal, Delaware Bay, Delaware.—Preparations were made for test borings at the site. Of the authorized sum of $75,000 for the construction of this light, $40,000 was appropriated. It is now estimated under present conditions that the cost of the structure, due to prevailing high prices and probable changes similar to those at the Elbow of Cross Ledge, will increase the original estimate to about $20,000 more. The Board therefore recommends that an additional appropriation of $55,000 be made therefor, and that the limit of cost be accordingly increased.

534. Ship John Shoal, Delaware Bay, New Jersey.—In April, 1907, contract was made for furnishing 800 tons, more or less, of riprap stone, and the work of delivering the stone is now in progress. Various repairs were made.

535. Cohansey, Delaware Bay, New Jersey.—The red sector of this light was widened about 4 degrees on November 23, 1906. A new sluice was made for the bank and various minor repairs were made.

538–539. Smyrna Range lights, Delaware Bay, Delaware.—A survey of the proposed light-house site was made and a map was plotted and the site was purchased.

541. Listons Range rear, Delaware River, Delaware.—Contract was made for the erection of a dwelling, barn, oilhouse, etc., and the work is about completed. On November 10, 1906, the reflector light was replaced with a range lens light. Various repairs were made. A well was dug by hired labor.

546–547. Reedy Island Range, Delaware River, Delaware and New Jersey.—The following is a part of a letter, dated November 26, 1906, from the Department of Commerce and Labor to the Treasury Department:

Completing the reestablishment of the Port Penn, Reedy Island, and Finns Point ranges on Delaware River, in the Fourth light-house district. It is estimated that $19,500 is needed for the purchase and erection of a suitable tower for the new Reedy Island Range. This tower was not included in the original estimate, as it was proposed to utilize the tower of the Finns Point Range rear light for that purpose. As the Light-House Board now proposes to retain the Finns Point Range, this plan has been necessarily abandoned.

It is also estimated that $5,500 is needed for the completion of the work originally estimated for, as the prices for labor and material have materially increased since the estimate was made.

The Light-House Board therefore recommends, and in that recommendation this Department concurs, that an appropriation of $25,000 be made for completing the reestablishment of Reedy Island Range lights.

546. Reedy Island Range front, Delaware River, Delaware.—The light-house, boathouse, and oilhouse were finished under contract. The reflector light was removed from the temporary lantern post and installed in the lantern of the new light-house on October 25, 1906,

and the locomotive headlight case, no longer in use, was removed from the pole in front of the dwelling and stored at the Edgemoor light-house depot.

551. Salem Creek, Delaware River, New Jersey.—A fire destroyed the lamp and ruined the lantern, post, and ladder. A new post, with ladder, was erected and a new lantern placed upon it.

555. Goose Island Flats, Delaware River, New Jersey.—Some work was done on the drawings for the foundation of the proposed light-house. In the act of Congress approved March 5, 1905, the erection of a light-house at this point at a cost of $85,000 was authorized and $40,000 appropriated for beginning the work. The recommendation incorporated in the last annual report from this district, that an additional appropriation of $45,000 needed to complete the work be made, is renewed.

562. Edgemoor, Delaware River, Delaware.—The light was moved inshore along the line of the Edgemoor bulkhead a distance of 550 feet.

563. Cherry Island Range front, Delaware River, Delaware.—The lens occulting apparatus was moved from the old tower to the temporary lantern on November 5, 1906. A window was placed in the upper side of the temporary lantern, so as to allow the light to be seen from up the river within a sector 30° in width. A temporary board-walk was built connecting the brick pavement around the dwelling with the concrete pavement around the storehouse. A contract was made for painting the dwelling and barn, and the work was completed in June, 1907.

564. Cherry Island Range rear, Delaware River, Delaware.—The boundary fences were rebuilt. Minor repairs were made.

565–566. Bellevue Range, Delaware River, Delaware.—The act approved on June 30, 1906, appropriated $4,000 for the establishment of the Bellevue Range light-station. The sites for the towers have been selected and the preliminary plans are now under consideration by the Board.

568. Schooner Ledge Range front, Delaware River, Pennsylvania.—Joint report of March 19, 1907, was submitted to the Board, recommending that this light be moved to the eastward of present position. Brick and sand necessary for paving the area around the light-house inclosed by the sea wall were purchased. Various repairs were made.

568–569. Schooner Ledge Range, Delaware River, Pennsylvania.—The Board considers that these lights should be moved to the eastward of present position to one parallel to and 350 feet distant from the present range. This will involve moving both front and rear lights, but not beyond the limits of the present reservations. This removal is due to a change in position of the dredged channel of the Delaware River recently made by the War Department. It is estimated that these changes can be made at a cost not to exceed $10,650, and the Board recommends that an appropriation of this amount be made therefor.

577, 578, 579. Horseshoe Range, East Group, Delaware River, New Jersey.—On May 13, 1907, the upper front lantern was moved to a position 22½ feet to the eastward of the old position, and reestablished

on a new concrete foundation. The old wooden bulkhead was removed. Minor repairs were made.

590. Assateague, seacoast of Virginia.—Frames for the ruby glass required for the red sector were made, and on February 20, 1907, the red sector light was exhibited for the first time. Various repairs were made.

591. Fishing Point, seacaost of Virginia.—Title to the new lighthouse site was obtained. A lens lantern carrying a red sector was erected, and the light was exhibited on March 15, 1907. In May, 1907, a new lens lantern with reservoir and two lamps were sent to the station and installed. On July 8, 1907, a red sector was inserted to cover an old wreck.

592. Assateague Anchorage, seacoast of Virginia.—Arrangements were made for inserting a white sector, and on March 15, 1907, the light was exhibited for the first time. The white sector in this light will soon cover Assateague Anchorage.

THE LIGHTING OF THE DELAWARE RIVER.

The following is a copy of a letter dated December 24, 1906, from the Department of Commerce and Labor to the House Committee on Interstate and Foreign Commerce:

This Department has the honor to acknowledge the receipt of the committee's letter of December 21, 1906, inclosing for examination and report thereon a copy of House bill No. 23027, "Authorizing the Light-House Board to establish post lights on the upper Delaware River between Bordentown, New Jersey, and Trenton, New Jersey."

In reply, this Department has the honor to state, at the instance of the Light-House Board, that the establishment of post lights on the upper Delaware River between Bordentown, N. J., and Trenton, N. J., is very desirable, and necessary to subserve the best interests of navigation.

This Department therefore, concurring with the views of the Light-House Board, recommends the passage of this bill.

In order to provide an appropriation to carry into effect the provisions of this bill, this Department has the honor to recommend, at the instance of the Light-House Board, that the coming sundry civil appropriation bill, under the heading of Light-House Establishment, Lighting of Rivers, be amended by striking out the word "Bordentown" and inserting in its place the word "Trenton," which will enable the Light-House Board to establish post lights on the Delaware River all the way from Philadelphia to Trenton, instead of stopping at Bordentown, as was provided in the last sundry civil appropriation act.

DAY OR UNLIGHTED BEACONS.

Cape Henlopen day beacon.—This beacon was repainted.

Rum Point day beacon.—This beacon has now disappeared. As it is of doubtful utility, it will not be replaced.

Block House Pier day beacon, Delaware River, Pennsylvania.—A square, slatted, wooden daymark, painted white, was erected on April 20, 1907. This pier or crib was originally the site of a light-house, but was abandoned. It is now a menace to navigation at night and in heavy weather, and its removal is necessary. It is estimated that this will cost not to exceed $4,500, and the Board recommends that an appropriation of that amount be made therefor.

The other daymarks are in good condition.

LIGHT-VESSELS.

506. Northeast End light-vessel, No. 44, off the seacoast of New Jersey.—This iron light-vessel was built in 1881 and 1882, is of 394 tons gross burden, and has a steam fog-signal. After being repaired she resumed her station on August 1, 1906. Relief light-vessel, No. 16, temporarily marking the station, was then withdrawn. The steam fog-signal became disabled, a new drum was built, and on January 17, 1907, was installed. She received needed fitments and supplies.

507. Five-Fathom Bank light-vessel, No. 79, off the seacoast of New Jersey.—This self-propelling steel light-vessel was built in 1904, is of 621 tons displacement, and carries a steam fog-signal. She has remained on her station during the entire year. On December 31, 1906, during a dense fog a steamship collided with this vessel, doing considerable damage. The cost of repairs was paid by the owners of this steamship. A submarine fog-signal bell was installed experimentally on October 15, 1906, and on May 29, 1907, was accepted and became a regular aid to navigation. She received needed fitments and supplies.

589. Winter-Quarter Shoal light-vessel., No. 45, of the seacoast of Virginia.—This steel wood-sheathed light-vessel was built in 1887, is of 336 tons gross burden, and has an 8-inch chime whistle operated by compressed air. Two 3½-horsepower oil-burning engines run the compressors. A submarine fog-signal was experimentally installed on September 15, 1906, and on May 29, 1907, it became a regular aid to navigation.

Relief light-vessel, No. 16.—This wooden vessel was built in 1854, is of 280 tons gross burden, and has a compressed air fog-signal actuated by two 13-horsepower oil engines. She was on Northeast End station from July 1, 1906, to August 1, 1906, on Winter-Quarter Shoal station from August 2, 1906, to September 15, 1906; and on Fenwick Island Shoal station from September 19, 1906, to October 24, 1906, relieving the regular light-vessels while they were undergoing needed repairs. She was towed to the general light-house depot at the conclusion of this service, by the light-house tender *Zizania.*

509. Overfalls light-vessel, No. 69, entrance to Delaware Bay, Delaware.—This self-propelling composite steam light-vessel was built in 1897–98, has a displacement of about 580 tons, carries a steam fog-signal and uses electric lights. She has remained on her station throughout the year. The submarine fog-signal plant, operated experimentally, was accepted on January 15, 1907, and became a regular aid to navigation. She received needed repairs, fitments, and supplies.

587. Fenwick Island Shoal light-vessel, No. 52, off the seacoast of Maryland.—This self-propelling steel steam light-vessel was built in 1892, is of 491 tons displacement, and carries a steam fog-signal. On September 19, 1906, she was withdrawn for repairs, relief light-vessel No. 16 temporarily marking the station, and on October 24, 1906, she returned to her station. Relief light-vessel, No. 16, was then withdrawn. A submarine fog-bell was installed experimentally on October 24, 1906, and on May 29, 1907, it became a regular aid to navigation.

FOG-SIGNALS OPERATED BY ENGINES.

Northeast End light-vessel, No. 44, New Jersey.—The 12-inch steam whistle was in operation some 657 hours and consumed about 28 tons of coal.

Five-Fathom Bank light-vessel, No. 79, New Jersey.—The 12-inch steam chime whistle was in operation some 626 hours and consumed about 35 tons of coal.

Overfalls light-vessel, No. 69, entrance to Delaware Bay, Delaware.—The 12-inch steam chime whistle was in operation some 624 hours and consumed about 32 tons of coal.

Delaware Breakwater Range front, Delaware.—The second-class Daboll trumpet, operated by an oil-burning engine, was in operation some 532 hours and consumed about 239 gallons of oil.

Brandywine Shoal, Delaware Bay, Delaware.—The second-class Daboll trumpet, operated by an oil-burning engine, was in operation some 492 hours and consumed about 293 gallons of oil.

Fourteen-Foot Bank, Delaware Bay, Delaware.—The second-class Daboll trumpet, operated by a hot-air engine, was in operation some 490 hours and consumed about 3 tons of coal.

Fenwick Island Shoal light-vessel, No. 52, off the seacoast of Maryland.—The 12-inch steam whistle was in operation some 475 hours and consumed about 80 tons of coal.

Winter-Quarter Shoal light-vessel, No. 45, Virginia.—The 8-inch chime whistle, operated by an oil-burning engine, was in operation some 442 hours and consumed about 391 gallons of oil.

Relief light-vessel, No. 16, was on Northeast End station July 1, 1906, to July 31, 1906, during which time her 6-inch siren was in operation about 39 hours and consumed about 69 gallons of oil. While on Winter-Quarter Shoal station from August 2 to September 15, 1906, the siren was in operation about 22 hours and consumed about 39 gallons of oil. While on Fenwick Island Shoal station from September 19 to October 24, 1906, the siren was in operation about 28 hours and consumed about 55 gallons of oil.

BUOYAGE.

The buoyage of this district is generally in good condition.

LIGHT-HOUSE DEPOTS.

Tucker Beach, New Jersey.—This depot is used for storage of buoys and appendages for Little Egg Inlet.

Absecon, Atlantic City, N. J.—This depot is used for storage of buoys and appendages for Absecon Inlet and vicinity.

Cape May Boathouse, Cape May, N. J.—This depot is used as headquarters for the shore boats of Northeast End light-vessel, No. 44, and Five-Fathom Bank light-vessel, No. 79. At the Government Iron Piers, Lewes, Del., are the boathouses for boats from Overfalls light-vessel, No. 69, and Fenwick Island Shoal light-vessel, No. 52; also Brandywine and Fourteen-Foot Bank light-stations. The approval of the War Department was obtained to enable the Board to make needed repairs here. The work is now in progress.

Chincoteague, Chincoteague Island, Virginia.—This depot is used by Winter-Quarter Shoal light-vessel, No. 45, for her shore boats, and it is used for storage of buoys and appendages for Chincoteague and Metomkin inlets.

Edgemoor, Delaware River, Delaware.—This is the main depot for the district, and is used for the storage of buoys and supplies and as a berth for the two light-house tenders. On February 24, 1907, the new wharf was damaged by ice. The injured portion was removed. The plug was straightened and put in place; meantime the front wharf was removed and the upper wharf was extended by contract. The section of wharf needed to connect the old wharf with the new extension was completed. Various repairs were made.

There is so much Government property stored at this depot, much of it inflammable, that the services of two keepers and an assistant are required. One of them ought to be in attendance night and day for the proper care and preservation of the depot and its contents. As a matter of fact the building is now left unattended at night and on Sundays and holidays, the keys being left with the keeper of the near-by Cherry Island Flats range front light-station. The keepers of this depot are now obliged to live at Wilmington, 4 miles distant. It is estimated that two keepers' dwellings can be erected here for not exceeding $16,000, and the Board recommends that an appropriation of that amount be made therefor.

The harbor space between the upper and lower wharves at this depot is not sufficient to allow tenders to lie up and down stream alongside of the bulkhead wharf. Hence the harbor should be widened. This requires additional land, as the present water front is entirely occupied. It is estimated that the needed land can be bought for $41,000, and the Board recommends that an appropriation of this amount be made therefor.

It is deemed important that a separate and isolated storehouse for oils should be provided at this depot. It is estimated that this can be built at a cost not to exceed $1,500, and the Board recommends that an appropriation of this amount be made therefor.

TENDERS.

Zizania.—This steel twin-screw steamer was built in 1887–88, and is of about 417 tons gross burden. Except during the eight days she was laid up for repairs, she was employed in conveying the inspector on inspection duty, towing light-vessels to and from stations, delivering rations, fuel, and supplies to light-vessels and light-stations, and in attending to the buoyage of the district. She established 8 buoys, removed 11, replaced, renewed, and restored 42, changed 175, lifted and painted 13, and recovered 4. She delivered some 636 tons of coal and 10 cords of wood to light-vessels and some 149 tons of coal and 11 cords of wood to light-stations, also the annual allowances of provisions to 5 light-vessels and 11 light-stations, and all the necessary extra supplies to vessels and stations.

In doing this work she steamed about 11,316 miles, consuming about 1,030 tons of anthracite coal, 5 cords of wood, and 410 gallons of lubricating oil. Some 39 hours' work was done on buoys by the crew at the iron pier near Lewes and at Edgemoor light-house depot. She made one trip to the general light-house depot at Tompkinsville,

N. Y., for supplies for the district and towing light-vessel No. 16 from Fenwick Island Shoal station. She was transferred on April 10, 1907, to the engineer of the Fourth light-house district. For 17 days she was laid up for repairs, and for 10 days she was used by the light-house inspector for the emergency coaling of light-vessels and the placing of buoys in shallow water. She was employed after her transfer in the inspection, construction, repair, and maintenance of lights, signals, beacons, and other aids, in removal of old piers at Schuylkill River Range light-station, Pennsylvania, and in the shipment and delivery of stores, materials, and lens apparatus. She also assisted in making test borings for the sites of new light-stations in Delaware Bay. In the performance of these duties since April 10, 1907, she steamed about 1,958 miles, with a consumption of some 180 tons of coal and 1½ cords of wood. She received necessary repairs, fitments, and supplies, but she still needs extensive repairs.

Sunflower.—This steel twin-screw steamer was built in 1906 and 1907, and is of about 797 tons displacement, and on March 23, 1907, was accepted. From that date until April 9 she was at the Edgemoor depot and in Philadelphia getting stores and equipment on board. From April 10 to the close of the fiscal year, except for nine days during which she was having the steering engine securely braced, she was employed on inspection duty, in delivering fuel and supplies to light-vessels and stations, and in attending to the buoyage of the district. She made two trips to the general supply depot for oil and the annual supplies for stations. She renewed and restored 9 buoys, changed 24, and recovered 1. She delivered some 183 tons of coal and the annual allowance of oil and supplies to light-vessels; also oil and supplies to a number of light-stations in the Delaware Bay and River. In doing this work she steamed about 2,580 miles, consuming about 399 tons of bituminous coal and 1 cord of wood.

Launch Leal.—This gasoline launch was built in 1884 and is of about 5 tons gross burden. She has not been in commission during the fiscal year, and is stored at the Edgemoor light-house depot, Edgemoor, Del.

FIFTH DISTRICT.

This district extends from, but does not include, Metomkin Inlet, Virginia, to and including New River Inlet, North Carolina. It embraces all aids to navigation on the seacoast of Virginia and North Carolina between the limits named, all of Chesapeake Bay, the sounds of North Carolina, and tributary waters.

Inspector.—Commander Edward Lloyd, jr., U. S. Navy.

Engineer.—Col. Richard L. Hoxie, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights, including 35 post lights	226
Light-vessels in position	5
Light-vessels for relief	2
Day, or unlighted, beacons	15
Fog-signals operated by steam, caloric, or oil engines	12
Fog-signals operated by clockwork	70
Whistling buoys in position	1
Bell buoys in position	9
Gas-lighted buoys in position	4
Other buoys in position, including pile buoys and stakes	1,290
Steamers *Maple*, *Holly*, and *Violet*, buoy tenders, and for supply and inspection	3
Steamer *Juniper*, used to supply gas to beacons in sounds of North Carolina, and to attend to stakes in Core Sound	1
Sharpie, for supplying beacons and coast stations	1
Steamers *Jessamine* and *Thistle*, for construction and repair	2

LIGHT-STATIONS.

613. Aaron Shoal, entrance to Pagan Creek, Virginia.—In December, 1906, there was erected in 6½ feet of water, on the end of Aaron Shoal, northerly side of the entrance to Pagan Creek, James River, a triangular beacon structure of creosoted pine piles, 40 feet long, driven 8 feet apart, with horizontal braces or slats, inner braces, decking, and with service box and ladder, all painted red. A fixed white light was shown on January 31, 1907, from a post lantern, 16 feet above the water.

614. Gap Shoal, Pagan Creek, Virginia.—A structure similar in all respects to the one on Aaron Shoal was erected in December, 1906, in 6 feet of water, on the edge of Gap Shoal, on the northerly side of Pagan Creek, southerly side of James River. It was lighted on January 31, 1907, the light being fixed white, shown from a post lantern, 16 feet above the water.

615. Bob Shoal, Pagan Creek, Virginia.—In December, 1906, a structure like the one on Aaron Shoal was built in 6 feet of water on the edge of Bob Shoal, on the northerly side of Pagan Creek, south-

erly side of James River. The light—a fixed white—was shown January 31, 1907, from a post lantern, 16 feet above the water.

659. Old Plantation Flats, northerly end of Old Plantation Flats, Virginia.—In December, 1906, a blower siren fog-signal apparatus was installed. It sounds, during thick or foggy weather, blasts of 6 seconds' duration separated by silent intervals of 2 seconds.

663. Cape Charles City Harbor Southern, Virginia.—In December, 1906, this beacon structure, which had been destroyed by a barge, was rebuilt at the cost of the owners of the barge.

664. Cape Charles City Harbor Northern, Virginia.—In November and December, 1906, this structure, which had been damaged by a barge, was repaired and the cost paid by the owners of the barge. In April the structure was again injured by vessels, the accident occurring in a similar way by the hawser of a towed barge dragging across the beacon. It was again repaired, and the cost was also reimbursed by the owners of the vessels.

666. Severn River, Mobjack Bay, Virginia.—In May, 1907, a beacon was erected in 12 feet of water on the edge of the shoal between Ware and Severn rivers, westerly side of Mobjack Bay. It is built of 3 creosoted pine piles, 40 feet long, driven 8 feet apart, with 6 horizontal slats, or braces, on each side, 3 inner braces flooring on the latter, a service box, and a ladder. It is painted with red and black horizontal stripes, and was lighted June 10, 1907, the light being fixed white shown from a post lantern 16 feet above the water.

670. Sturgeon Creek Shoal, Rappahannock River, Virginia.—This beacon was carried away during a severe storm with unusually high tide on June 1, 1907. Arrangements are being made for its reestablishment.

673. Urbana Creek Outer, Virginia.—This beacon, damaged by the ice two years ago, was rebuilt in March, 1907, on the same plan and at the same site. The piles were sheathed with yellow metal extending 3 feet above the water.

674. Urbana Creek Inner, Virginia.—This structure, which collapsed in November, 1906, because of the ravages of the shipworm, was rebuilt in March, 1907, at the same location, the piles being sheathed with yellow metal extending well above high-water line.

677. Ross Rock, Rappahannock River, Virginia.—A new lantern was provided in May, 1907, to take the place of one destroyed by the ice during the past winter.

679. Pungoteague Creek, below Tangier Island, easterly side of Chesapeake Bay, Virginia.—Plans have been prepared for the proposed structure and proposals, to be opened on July 1, 1907, have been invited for furnishing the metal work required therefor.

680. Watts Island, entrance to Tangier Sound, Virginia.—A new landing wharf, 50 feet long by 3 feet wide, was built.

—. *Great Point Bar, entrance to Little Annemessex River, Maryland.*—The following recommendation, which was made in the Board's last two annual reports, is renewed:

A light at this locality is much needed to enable vessels to enter the harbor of Crisfield at night. After leaving Janes Island light-house the channel narrows and makes an abrupt turn before Somers Cove light is reached. At this turn, which is marked by a buoy during the daytime, a light-house should be placed. During the past few years a number of vessels have gone ashore here because of the absence of an aid of this kind. A suitable structure can be established for

about $10,000, and an appropriation of this amount is recommended for the establishment of a light at this point.

686. Fleet Point, Great Wicomico River, Virginia.—In November, 1906, a triangular beacon formed of creosoted pine piles, with horizontal braces or slats, painted red, was erected in 9 feet of water on the westerly edge of Fleet Point Flats, on the northerly side of the entrance to Great Wicomico River, westerly side of Chesapeake Bay. A fixed white light was shown on January 1, 1907, from a post lantern 16 feet above the water.

693. Ragged Point, Potomac River, Maryland.—The act approved on March 4, 1907, appropriated $15,000 more for completing this station, making the total amount available $30,000. This is not sufficient to establish a suitable light and fog-signal here. A structure was designed as moderate in cost as is compatible with safety. Bids were asked several times for furnishing the metal work, and further efforts were made to obtain a satisfactory bid, but the lowest received was so high as to show that the light-house could not be built within the amount appropriated. The Board estimates that an additional appropriation of about $15,000 will be needed for its establishment, and it is recommended that an appropriation of this amount be made therefor.

—. *La Trappe River Range, Maryland.*—The act approved on March 4, 1907, appropriated $10,000 for establishing beacon lights at the mouth of La Trappe River, Maryland. The work will be done as soon as practicable.

726. Queenstown Creek Range front, No. 1, Maryland.—This beacon, which was carried away by ice during the winter, was rebuilt in May, 1907.

729. Baltimore, off Craighill Channel entrance, mouth of Patapsco River, Maryland.—The surety company on the bond of the defaulting contractor had, at the beginning of the fiscal year, nearly completed arrangements at the site to commence the righting of the overturned caisson of the light-house by means of heavy weights suspended from wire cables secured to the structure and led over timber A frames, and booms projecting 50 feet beyond its outer edge. On September 29, 1906, the caisson had been carried over toward the vertical about 45°, beyond which point the weights at the ends of the booms were ineffective because resting on the bottom. The booms were removed, weights were transferred to the top of the A frames, and a further movement of about 10° in the proper direction resulted. Pumps were then set up on the pier, and by means of these mud was removed from under the high side of the caisson. With this assistance, and under the weight on the A frames and the strain on the tackles, the caisson moved slowly until, on November 20, it had reached a position only about 17° from the vertical. After a few days' work with the pumps, without any perceptible movement of the caisson, the surety company decided, in view of the lateness of the season, to suspend operations until spring. Work was actively resumed in April, 1907. The A frames and levers used in the dredging shafts were removed. Eighteen cylinder plates (completing the third course) and the 30 plates of the fourth course were set and bolted in position on the caisson. About 80 tons of large stone was placed in the compartment on the high side of the caisson, mud was pumped from under that side, a strain was taken on the tackles, and the top

of the upper course of cylinder plates on the east, or high side, moved to the eastward about 5 feet 2 inches. Wooden stoppers were made for closing the lower ends of the 4 dredging shafts, and 24 timbers were bolted to the piles under the pier to be used in holding down the caisson when it is pumped out. The fifth and sixth courses of cylinder plates were then added, about 20 tons more of large stone was placed in the east compartment and about 80 tons in the center compartment. Thirty feet of the air shaft was set and bolted in place. On June 30, 1907, the caisson was only about 6 feet out of level.

Fort McHenry Channel Range lights, Baltimore Harbor, Maryland.—The following is a copy of a letter dated March 9, 1906, from the Secretary of Commerce and Labor to the Secretary of the Treasury:

This Department begs to state, at the instance of the Light-House Board, that the Fort McHenry channel is the only channel from Chesapeake Bay to Baltimore which is not adequately lighted. The Lazaretto Point light, until recently, was a guide to the harbor, but its recent obstruction by the erection of high buildings now practically destroys its value for this purpose. Steam vessels going to and from Baltimore have asked, because of the obstruction of the Lazaretto Point light, for the establishment of range lights as a guide for Fort McHenry channel. Plans have been considered, the most feasible of which is the establishment of range lights with the front light near the intersection of the Brewerton and Fort McHenry channels. The front light would also serve as a turning point for vessels going into or out of the harbor, and the rear light would indicate the shoal near Rock Point, on the west side of the Patapsco River. While the expense will be considerable, it will be justified by the large amount represented by the commercial interests in this vicinity.

I have the honor, therefore, to recommend that the proper measures be taken to obtain an appropriation of $85,000 for the front range light and of $40,000 for the rear range light, $125,000 in all, for the establishment of the Fort McHenry Channel Range lights.

746. Currituck Beach, seacoast of North Carolina.—In January the pier or landing wharf was rebuilt. Various repairs were made.

751. Cape Lookout, seacoast of North Carolina.—The extensive repairs commenced in June, 1906, were completed. On June 24, 1907, the construction of the keeper's dwelling was commenced. The brick piers were laid for the dwelling and its appurtenant buildings and some framing has been done.

769. Poquoson Point, Pasquotank River, North Carolina.—In January three pine piles 40 feet long were driven in 9½ feet of water on the southwesterly edge of Poquoson Point Shoal, northeasterly side of Pasquotank River, and the bark was removed above the water line. Six 2-inch planks, 10 feet long, were spiked horizontally on each of the three sides. Braces were spiked in between the piles near the top, and the floor or decking was laid on and fastened to them. A service box was set in place and bolted to the decking. A ladder was put up and a coat of red lead was applied inside and outside. On March 8, 1907, a fixed white light was shown from a post lantern 16 feet above the water.

770. Cobbs Point, Pasquotank River, North Carolina.—In January, 1907, a black duplicate of the Poquoson Point beacon was erected in 7½ feet of water on the northerly edge of Cobbs Point Shoal, southwesterly side of Pasquotank River, Albemarle Sound. It was lighted on March 8, 1907, the light being fixed white, shown from a post lantern 16 feet above the water.

773. Scuppernong River front, Albemarle Sound, North Carolina.—In February, 1907, this structure, which had been partially overturned by the ice, was righted. Various repairs were made.

807. Fork Point, Pamlico River, North Carolina.—This beacon, which had been badly damaged by ice, was rebuilt in October.

810. Windmill Point Shoal, Pamlico River, North Carolina.—In February, 1907, this beacon, which was badly decayed, was rebuilt. The old beacon was taken down, and the piles were cut off 2 feet above the water.

815–816. Garbacon Shoal and Adams Creek, Neuse River, North Carolina.—Two triangular structures were built here during March, 1907. Each consists of three creosoted piles, 40 feet long, driven 8 feet apart, with six horizontal slats on each side, three inner braces, decking, a service box, and a ladder. They were lighted on May 1, 1907. Each shows a fixed white light from a post lantern 16 feet above the water. Garbacon Shoal structure is painted black and Adams Creek structure red.

817. Clubfoot Creek, Neuse River, North Carolina.—This beacon was rebuilt in February, 1907, and in the same manner as the Windmill Point Shoal structure.

818. Wilkinson Point Shoal, Neuse River, North Carolina.—In February, 1907, this structure was rebuilt in the same manner as the Windmill Point Shoal beacon.

819. Otter Creek, Neuse River, North Carolina.—This beacon was rebuilt in February in the same manner as the Windmill Point Shoal structure.

821. Fort Point Channel, Neuse River, North Carolina.—In February a beacon, triangular in plan, was erected in 10 feet of water on the easterly side of Neuse River, on the prolongation of the axis of the new channel through Fort Point Shoal. Three pine piles, 40 feet long, were driven 8 feet apart. Six planks, 10 feet long, were spiked horizontally on each of the three sides to brace the structure, and at the same time make it more effective as a daymark. Timbers were spiked in between the piles near the top, and the decking or floor was laid on and fastened to them. A service box was set in place and bolted to the decking. A ladder was put up. The structure was lighted on April 1, 1907, the light being fixed white, shown from a post lantern 16 feet above the water.

822–823. Lower Green Spring and Upper Green Spring, Neuse River, North Carolina.—Both these beacons were replaced in February, 1907, on the plan employed in the case of the Windmill Point Shoal beacon, North Carolina.

824. Turn Stake, Neuse River, North Carolina.—This beacon structure, which was badly decayed, was rebuilt in March, 1907, on the same plan and at the same site.

825. Green Shoal, Neuse River, North Carolina.—This beacon was rebuilt in March, 1907, at the same location and on the same plan.

826–829. Western Channel, Neuse River, North Carolina.—In March, 1907, four triangular pile structures were erected to mark the new western dredged channel in the Neuse River above Newbern, N. C. They were all built on the same plan, as follows: Three pine piles, 40 feet long, were driven 8 feet apart. Six planks were spiked horizontally on each side, at about 6-inch intervals. Three inner braces, one on each side, were let into and fastened to the piles near

the top. On these was laid the decking, or floor, upon which was placed and secured the service box. A ladder was made and set up.

Fixed white post-lantern lights, each 16 feet above the water, were first shown from the structures on May 1, 1907. They are known respectively as Western Channel Lower, Western Channel Middle, Western Channel Upper, and Bachelor Creek beacons. The Lower structure is painted red and the Middle, Upper, and Bachelor Creek structures black.

DAY OR UNLIGHTED BEACONS.

No repairs were made to these beacons during the year. Most of them are in fair order.

OILHOUSES.

No oilhouses were erected during the year in this light-house district.

LIGHT-VESSELS.

595. Cape Charles light-vessel, No. 49, off entrance to Chesapeake Bay, Virginia.—This composite light-vessel was built in 1890–91, has a displacement of about 470 tons, and has a steam fog-signal and a submarine bell. On August 15, 1906, she was brought to Baltimore and repaired, light-vessel No. 7 meantime taking her place. She returned to her station on September 26, 1906, and was there at the close of the fiscal year. She received during the year needed repairs, fitments, and supplies.

600. Tail of the Horseshoe light-vessel, No. 46, lower part of Chesapeake Bay, Virginia.—This steel wood-sheathed light-vessel was built in 1887, is of 337 tons gross burden, and has a steam fog-signal and a submarine bell. She remained on her station during the year, and received no repairs excepting those made by her crew. She received needed fitments and supplies.

607. Bush Bluff light-vessel, Elizabeth River, below Norfolk, Va.—The composite schooner *Drift*, of about 87 tons gross burden, borrowed from the Coast and Geodetic Survey, marks this station. She remained on the station during the year, receiving needed repairs, fitments, and supplies.

749. Diamond Shoal light-vessel, No. 71, off the Outer Diamond Shoal off Cape Hatteras, North Carolina.—This steam composite, self-propelling light-vessel, built in 1897–98, has a displacement of about 589 tons, is equipped with a 12-inch steam whistle, a submarine bell, and displays two electric lights. She was relieved on July 1, 1906, by light-vessel No. 72, and went to Baltimore for minor repairs, and on September 9, 1906, relieved light-vessel No. 7, on Cape Charles station, entrance to Chesapeake Bay. She was relieved on September 25, and on October 1 returned to her station off Diamond Shoals, relieving light-vessel No. 72. She was relieved on December 1, 1906, by light-vessel No. 72, and went at once to Cape Lookout Shoals station, off Cape Lookout, and relieved light-vessel No. 80, and remained there until December 25, when she was relieved by light-vessel No. 80, and went to Baltimore, where she received certain repairs. On February 1, 1907, she was replaced on her station. On February 20, in a heavy gale, she lost her propeller, and, on

February 27, was relieved by light-vessel No. 72, and went to Baltimore, where she received a new propeller wheel and other fitments. She was replaced on the station on May 1, 1907, and she was relieved June 20 by light-vessel No. 72, going to Baltimore, where she was fitted to relieve Nantucket Shoals, Massachusetts, light-vessel, at an early day.

749. Diamond Shoal light-vessel, No. 72, off the Outer Diamond Shoal off Cape Hatteras, North Carolina.—This steel, steam, self-propelling light vessel was built in 1900, has a displacement of about 538 tons, is equipped with a 12-inch steam whistle, a submarine bell, and shows two electric lights. On July 1, 1906, she took station off Diamond Shoals, where she remained until October 1, 1906, when she was relieved by light-vessel No. 71 and went to Baltimore, where she was repaired. She relieved light-vessel No. 71 on the station on December 2, 1906, where she remained until January 31, 1907, when she was relieved by light-vessel No. 71, and went to Baltimore, where she was further repaired. She was replaced on her station on February 27, and was relieved on May 1 by light-vessel No. 71, when she went to Baltimore and received other minor repairs. On May 21 she left Baltimore for New York, where she was loaded with the annual supplies for all the light-houses in the Fifth light-house district. She left New York on May 27, and arrived at the Portsmouth light-house depot two days later and unloaded the annual supplies. When she left Portsmouth she went to Baltimore, where, after being outfitted, she went to her station and, on June 21, 1907, relieved light-vessel No. 71, where she still was at the end of the fiscal year.

753. Cape Lookout Shoals light-vessel, No. 80, off the outer end of the shoals making out from Cape Lookout, North Carolina. This steel, steam, self-propelling light-vessel was built in 1904; she measures about 321 tons gross burden, and is equipped with a 12-inch steam whistle. She was on the station from July until December, 1906, when, after being relieved by light-vessel No. 71, she went to Baltimore, where she was repaired. She was replaced on her station on December 25, where she was at the close of the fiscal year.

—. *Relief light-vessel, No. 7.*—This wooden light-vessel was built in 1854, and is of 142 tons gross burden. She was held at the Portsmouth, Va., light-house depot for emergencies. On August 15, 1906, she relieved Cape Charles light-vessel. On September 9, 1906, she was in turn relieved by light-vessel No. 71, and went to Baltimore, where she received extensive repairs.

—. *Cape Henry light-vessel, entrance to Chesapeake Bay, Virginia.*—The Board renews the recommendation made in its last annual report, that an appropriation be made for the establishment of this light-vessel, and states that it is of opinion that $115,000 is sufficient for this purpose.

LIGHT-HOUSE DEPOTS.

Lazaretto Point, Baltimore Harbor, Maryland.—The buoys and appendages for the upper part of Chesapeake Bay and tributaries are kept here. Various repairs were made.

Annapolis, Annapolis Harbor, Maryland.—Buoys are kept here for that portion of Chesapeake Bay between Sandy Point and the Patuxent River.

Point Lookout, mouth of Potomac River, Maryland.—Buoys and appendages for the middle section of Chesapeake Bay and its tributaries are kept here.

Washington, Pamlico River, North Carolina.—Buoys and appendages for the sounds of North Carolina are kept here. Repairs are now being made at this depot, and when they are completed it will be in good condition.

Washington, D. C.—The act approved on March 4, 1906, appropriated $30,000 for a new wharf to replace the present structure at O and Water streets, Washington, D. C.

Since the estimates for this wharf were prepared it has greatly deteriorated, which has required a change in plans, and meantime the price of labor and material has largely increased. The Board now estimates that to build a suitable wharf here, one which should conform to the requirements of the Commissioners of the District of Columbia, will cost approximately $70,000, and it recommends that a further appropriation of $40,000, in addition to the $30,000 appropriated by the act approved on March 4, 1906, be made therefor.

FOG-SIGNALS OPERATED BY ENGINES.

595. Cape Charles light-vessel, No. 49, entrance to Chesapeake Bay, Virginia.—This 12-inch steam whistle was in operation some 239 hours, and consumed about 34 tons of coal.

597. Cape Henry, south side of the entrance to Chesapeake Bay, Virginia.—This first-class siren was in operation some 279 hours, and consumed about 18 tons of coal.

600. Tail of the Horseshoe light-vessel, No. 46, entrance to Chesapeake Bay, Virginia.—This 12-inch steam whistle was in operation some 153 hours, and consumed about 70 tons of coal.

601. Thimble Shoal, northerly side of channel to Hampton Roads, Virginia.—This compressed-air siren was in operation some 308 hours, and consumed about 217 gallons of mineral oil.

659. Old Plantation Flats, easterly side of Chesapeake Bay, Virginia.—This compressed-air siren was in operation some 99 hours, and consumed about 42 gallons of mineral oil.

667. Wolf Trap, west side of Chesapeake Bay, Virginia.—This third-class Daboll trumpet was in operation some 297 hours, and consumed about 183 gallons of mineral oil.

687. Smith Point, entrance to Potomac River, Virginia.—This third-class Daboll trumpet was in operation some 327 hours, and consumed about 335 gallons of mineral oil.

715. Cove Point, west side of Chesapeake Bay, Maryland.—This third-class Daboll trumpet was in operation some 259 hours, and consumed about 246 gallons of mineral oil.

749. Diamond Shoal light-vessels, Nos. 71 and 72, off seacoast of North Carolina.—These 12-inch steam whistles were in operation about 269 hours. Their consumption of coal can not be stated, as the boilers of both vessels were continuously under steam when on the station.

753. Cape Lookout Shoals light-vessel, No. 80, off seacoast of North Carolina.—This 12-inch steam whistle was in operation about 83 hours, and consumed about 3 tons of coal.

784. Roanoke Marshes, west side of Pamlico Sound, North Carolina.—This compressed-air siren was in operation some 216 hours, and consumed about 68 gallons of mineral oil.

BUOYAGE.

The past winter having been quite severe, the damage to buoys was considerable, requiring extensive work by the tenders in replacing them in the spring. The buoyage of the district is now in good condition.

LIGHT-HOUSE TENDERS.

Maple.—This steel twin-screw steamer was built in 1892–93, and has a displacement of about 551 tons. She was actively employed during the entire year, steaming about 14,294 miles, on a consumption of some 1,262 tons of bituminous coal. She was employed 29 days on inspection duty; 104 days in working buoys and attending to light-vessels; 103 days in delivering fuel, rations, and supplies to light-houses and light-vessels; 90 days at light-house depots, coaling, loading supplies and buoys, and doing other necessary work; and she was 39 days under repair. She worked 409 buoys, visited 93 stations and vessels, delivered 182 tons of coal and 60 cords of wood to light-houses and light-vessels, inspected 63 stations, supplied 1 station with rations; and the crew was employed 14 days at light-house depots cleaning and painting buoys. She received needed supplies, repairs, and fitments during the year.

This tender was loaned to the Seventh light-house district, where, December 16, 1906, to February 9, 1907, she was engaged in delivering supplies to light-stations and was on inspection duty. The distances she steamed and coal she consumed while in the Seventh light-house district are reported in the chapter relative to the Fifth light-house district.

Holly.—This iron side-wheel steamer was built in 1881, was rebuilt and sheathed with wood in 1898, and is of about 367 tons gross burden. She was employed on inspection, supplying lights, changing and replacing buoys, and attending to light-vessels. She steamed some 11,773 miles on a consumption of about 955 tons of bituminous coal. She was employed 40 days on inspection duty; 159 days working buoys and attending light-vessels; 65 days delivering fuel, rations, and supplies to stations and vessels; 69 days at light-house depots, coaling, loading supplies and buoys, and doing necessary work; and she was 32 days under repair. She worked 390 buoys, visited 186 light stations and vessels, delivered 167 tons of coal and 102 cords of wood, inspected 117 light-stations, supplied 7 stations with rations, and her crew was employed 41 days at light-house depots cleaning and painting buoys. She received needed supplies, repairs, and fitments during the year.

Violet.—This wooden side-wheel steamer was built in 1861, and is of about 231 gross tons. She does the entire work of supplying lights, working buoys, and inspecting lights in the sounds of North Carolina, excepting the delivery of rations in the fall, besides doing much work in the other parts of the district. She steamed about 9,217 miles on a consumption of some 635 tons of bituminous coal. She was employed

37 days on inspection duty; 116 days working buoys and attending light-vessels; 101 days delivering fuel, rations, and supplies to light stations and vessels; 85 days at depots, coaling, loading supplies and buoys, and doing other necessary work; and was 26 days under repair. She worked 449 buoys, visited 245 light-houses and light-vessels, delivered 92 tons of coal and 84 cords of wood to stations and vessels, inspected 167 stations, supplied 18 stations with rations, and the crew was employed 41 days at light-house depots cleaning and painting buoys. She received needed supplies, repairs, and fitments during the year.

Juniper.—This steel twin-screw vessel was built in 1904, and is of 104 gross tons. She is used for supplying the Currituck Sound beacon lights, North Carolina, and attending to charging gas buoys in the district, and to part of the work in the North Carolina sounds. She received needed supplies, repairs, and fitments during the year. She steamed during the year about 3,157 miles on a consumption of some 188 tons of bituminous coal, and delivered 98,560 cubic feet of gas to beacon lights and buoys, established and replaced 89 stakes, repaired 41 stakes, and painted 60 stakes in Core Sound and Bogue Sound, North Carolina.

Sharpie.—This vessel is kept at Long Point, North Carolina, to assist in supplying the lights on the seacoast which are reached from the sound's side.

Jessamine.—This vessel was employed during the year in making repairs and improvements at 69 light-stations and two light-house depots and in the inspection of 60 light-stations and two light-house depots. She made borings at the sites of Ragged Point and Pungoteague Creek light-station, Virginia, to determine the character of the foundation. She rendered assistance to a schooner in distress off Pamlico Point, North Carolina. She sounded around four light-houses to ascertain the extent of erosion of the shoal. She was used in the investigation of the damage done to two light-stations by colliding vessels. She was engaged in loading and unloading materials for light-stations 16 days, in cleaning and painting tender 63 days, in cleaning boiler 7 days, and was undergoing repairs 29 days. She steamed about 7,086 miles during the year, consuming some 675 tons of soft coal.

Thistle.—This tender was employed in towing the barge, the scow, and the pile-driver scow with materials and working party, and in otherwise assisting in repairs and improvements at 56 light-stations and one light-house depot. In so doing she traveled about 2,923 miles, with a consumption of some 277 tons of coal. She was under steam 2,483 hours during 252 days. She was in port during 43 days, while cleaning boiler and receiving necessary repairs to hull and machinery.

WORKING PLANT.

Barge.—She was put in order.

Scow.—She received proper repairs, fitments, and supplies.

Pile-driver scow.—This vessel was thoroughly repaired, and a new steam pump was provided.

Yawl.—She was cleaned, repaired, and painted.

Rowboat.—It was properly cared for.

SIXTH DISTRICT.

This district extends from, but does not include, New River Inlet, North Carolina, to and includes Jupiter Inlet light-station, Florida. It embraces all aids to navigation on the seacoast, bays, sounds, harbors, rivers, and other tidal waters of North Carolina, South Carolina, Georgia, and Florida between the limits named.

Inspector.—Commander William S. Benson, U. S. Navy, until July, 1907; since then Commander Hugh Rodman, U. S. Navy.

Engineer.—Capt. George P. Howell, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights, including 117 post lights	226
Light-vessels in position	3
Light-vessels for relief	1
Day or unlighted beacons	66
Fog-signals operated by steam, caloric, or oil engines	3
Fog-signals operated by clockwork	3
Whistling buoys in position	9
Bell buoys in position	11
Other buoys in position	272
Steamer *Wistaria*, buoy tender, and for inspection and supply	1
Schooner *Pharos*, for construction and repair	1
Naphtha tender *Water Lily*, for inspection and supply	1
Naphtha tender *Snowdrop*, for construction and repair	1

LIGHT-STATIONS.

833. Cape Fear, North Carolina.—The upper part of the tower above the columns was, in August, 1906, changed from white to black to make it more conspicuous as a daymark. The roadway from the wharf to the station, 3 miles long, was cleared of brush and woods.

870–880. Winyah Bay lights, South Carolina.—Rabbit Island, No. 2, was established, replacing Hare Island, No. 7. Creosoted piles were delivered and two iron towers were ordered for use in establishing two new range lights to mark the dredged channels.

882. Bull Bay, South Carolina.—The yard was covered with mud to prevent the drifting of the sand. The fence was rebuilt; a plank walk 1,400 feet long was built from the wharf to the station. Various repairs were made.

885–886. Cumming Point Range, South Carolina.—New structures for this range were built, located on the line of the best water.

887. Main Channel Range front, South Carolina.—The new tower at Fort Sumter was completed and on August 15, 1906, it was lighted for the first time. Minor repairs were made.

889–890. Mount Pleasant Range, South Carolina.—A drain 40 feet long was laid from the sea wall to the water.

891–892. South Channel Range, South Carolina.—About 100 feet of low plank walk was built.

902. Lazaretto light, South Carolina.—This light was established on March 5, 1907, and is in good condition.

—. *Elliott Cut light, South Carolina.*—This light was established on May 20, 1907, and is in good order.

—. *Dawho River lights, South Carolina.*—A survey was made of the mouth of Dawho River to locate the proposed lights and beacons.

912. Hunting Island, South Carolina.—An iron tramway was built and a plank walk 3,300 feet long was laid from the wharf to the station.

916–917. Paris Island Range, South Carolina.—Some 111 feet of picket fence was rebuilt. Various repairs were made.

923–924. Bloody Point Range, South Carolina.—Some 175 feet of brick wall was laid and minor repairs were made.

928–929. Oyster Beds Range, Georgia.—The keeper's small dwelling on Fort Pulaski was enlarged for use as a dwelling for both keepers. An hydraulic ram was installed for lifting water from artesian well to the tank near the dwelling. A new wharf and plank walk approach were built.

952–953. St. Simon Range, Georgia.—Condemnation proceedings are being commenced for obtaining title to the site for a rear light of a range to mark the new dredged channel across the outer bar.

—. *Satilla River lights, Georgia.*—Structures were erected for two lights at the mouth of Satilla River, Georgia.

965. Little Cumberland Island, Georgia.—Some 100 feet of low plank walk was rebuilt.

966. Amelia Island, Florida.—A wire picket fence, replacing the old wooden one, was erected around the dwelling and the tower. A contract was made for sinking a deep well to augment the water supply of the station.

1059. Mosquito Inlet, Florida.—Some 200 feet of sewer pipe was laid, a wharf was built at the landing, and various repairs were made.

1060. Cape Canaveral, Florida.—An artesian well was sunk and water pipes were run from the well to the dwellings and other parts of the grounds.

1062. Jupiter Inlet, Florida.—A windmill was completed and a boathouse was built.

DAY OR UNLIGHTED BEACONS.

There are in this district 66 day or unlighted beacons, which are in fairly good condition.

OILHOUSES.

During the year oilhouses were built at Bloody Point Range and Tybee Knoll Cut Range light-stations.

LIGHT-VESSELS.

834. Frying-Pan Shoals, No. 1, seacoast of North Carolina.—This wooden light-vessel was built in 1855, is of about 275 tons gross burden, old measurement, and has a steam fog-signal. She broke adrift from her station on September 17, and was replaced on September 23, 1906. She again broke adrift on October 21, one lifeboat was carried

away, one davit was broken, the other badly damaged, and one mushroom anchor with 38 fathoms of chain was lost. She was towed to Wilmington, N. C., repaired, furnished with a new lifeboat, and, on October 24, was replaced on the station. She broke adrift a third time, on April 1, 1907, losing 85 fathoms of chain and a mushroom anchor, and was picked up off Charleston and towed to that port, where she was repaired. She will be returned to her station in July. She received needed fitments and supplies during the year.

884. Charleston light-vessel, No. 34, off Charleston Harbor, South Carolina.—This wooden light-vessel was built in 1864, and is of about 150 tons gross burden, old measurement. She remained on her station during the year and received needed stores and fitments. A wireless-telegraph operator was on board all the year.

913. Martins Industry light-vessel, No. 29, off the seacoast of South Carolina.—This wooden light-vessel, of about 150 tons gross burden, was built in 1864. She has a bell for a fog-signal. She remained on her station during the year and received needed stores and fitments.

951. Brunswick light-vessel, No. 84, off the seacoast of Georgia.—The act approved on March 4, 1907, appropriated $50,000 for completing, equipping, and outfitting complete for service a steel, steam, self-propelling light-vessel, with a steam fog-signal. The vessel is being built under a contract which provides that she shall be finished within the year.

—. *Relief light-vessel, No. 53.*—This steel, steam, self-propelling light-vessel was built in 1892, is of about 491 tons displacement, and has a steam fog-signal. She went, on August 16, 1906, to the First light-house district on duty. After completion of duties in the First and Second light-house districts, and while returning to this district, her engine became disabled off New York, and she was towed to the general light-house depot, at Tompkinsville, N. Y., where minor repairs to the engine were made. She arrived at Charleston, on February 2, 1907, and on February 7 she was sent with a cargo of oil, acting as a light-house tender to light-stations in the extreme southern portion of the district. During the year she steamed about 2,860 miles. On April 5, 1907, she steamed to Frying-Pan Shoals station, where she relieved light-vessel No. 1, and is still on that station. She is equipped with submarine signal bell. She received needed fitments and supplies during the year.

FOG-SIGNALS OPERATED BY STEAM OR OIL ENGINES.

834. Frying-Pan Shoals light-vessel, No. 1, off the seacoast of North Carolina.—This 12-inch steam whistle was operated some [illegible] hours and consumed about 4,400 pounds of coal.

884. Charleston light-vessel, No. 34, off Charleston Harbor, South Carolina.—This 8-inch chime whistle was in operation some 119 hours and consumed about 96 gallons of oil.

BUOYAGE.

The buoyage of this district is in good condition. Some 410 buoys were painted, 256 replaced or relieved, 103 repaired, 4 recovered, 3 established, 16 discontinued, and necessary repairs made to buoy chains.

LIGHT-HOUSE DEPOTS.

Castle Pinckney depot, Charleston Harbor, South Carolina.—In this depot are stored the supplies for distribution to the various light-stations throughout the district. Here also are stored all buoys, buoy appendages, chains, etc., not in use, and all unserviceable old property until it is disposed of. The brick dwelling occupied by the keeper has settled and is leaning to such an extent that it is believed it will have to be abandoned within the year. Proper measures will be taken relative to its replacement.

Old post-office building, Charleston, S. C.—This building is used as an office for the inspector of the district, as a lamp shop, and as a storeroom.

LIGHT-HOUSE TENDERS.

Wistaria.—This iron side-wheel steamer was built in 1881–82, and is of about 450 tons gross burden. She painted 320 buoys, replaced or relieved 256, repaired 6, established 3, discontinued 16, and recovered 4 buoys. Her crew was employed 64 days upon buoys at the light-house depot, and 5 days unloading oil and transferring it to the depot. In September, 1906, she went in search of Frying-Pan Shoals light-vessel, No. 1, which had been blown off her station and found her off the entrance to Cape Fear River, North Carolina, and towed her to Wilmington for repairs. In October she picked up the same light-vessel off Charleston, and towed her first to that port and later back to her station. In April, 1907, she again picked up the light-vessel off Charleston and towed her in to that port for repairs. She dragged for lost moorings at the anchorage of that light-vessel and recovered 90 fathoms of chain and a mushroom anchor. She was employed on inspection duty 78 days; she rebuilt and repaired post lights, delivered oil and supplies to stations, and was laid up for repairs 60 days. The engines and boilers are being overhauled, the bottom is being cleaned and painted, and her repairs will be completed early in July. She was equipped with submarine sound-signal receiving apparatus. She received needed fitments and supplies during the year. She steamed some 10,314 nautical miles and consumed about 714 tons of coal and 4 cords of wood.

Water Lily.—This wooden 65-foot twin-screw naphtha tender was built in 1895, and is of about 33 tons gross burden. She steamed some 5,445 miles and consumed about 3,500 gallons of naphtha. She assisted in delivering oil and supplies and inspected 350 light-stations and post lights, built 12 post lights, repaired and painted 10 buoys, and relieved 6 buoys. This vessel is used especially for navigating the inland waters.

Pharos.—This wooden schooner, which was purchased in 1854 and rebuilt in 1879, is of 168 tons gross burden. She was employed in building a new tower at Fort Sumter, at Rabbit Island, No. 2, and an oilhouse at Tybee Knoll Cut light-station. She was engaged in repairs at Georgetown, Winyah Bay Entrance ranges, Cape Romain, Fort Sumter, Tybee, Cockspur, Oyster Beds Range, Tybee Knoll Cut Range, and New Channel Range. She sailed during the year some 475 miles. She received needed minor repairs, supplies, and fitments.

Tender for the engineer of the Sixth light-house district.—The wooden schooner *Pharos* was purchased in 1854 and rebuilt in

1879, is of 168 tons gross burden. This schooner is now unseaworthy and past economical repair. The Board estimates that a small steamer suitable for the purpose can be built to take her place at a cost not exceeding $25,000, and it recommends that an appropriation of that amount be made therefor.

Snowdrop.—This wooden gasoline launch was built in 1896, and is of 32 tons gross burden. She was employed in building the new tower at Fort Sumter, new structures for Cumming Point Range, Elliott Cut light, lights and beacons in Satilla River, and an oilhouse at Bloody Point Range light-station. She was engaged in repairs at Cape Romain, Bull Bay, Hunting Island, Paris Island Range, Bloody Point Range, Little Cumberland Island, and St. Johns River light-stations. She made numerous trips of inspection to light-stations, and steamed some 5,733 miles, consuming 4,922 gallons of gasoline. She was fitted with new propellers and minor repairs were made to hull and machinery.

Cypress.—The act approved on March 4, 1907, appropriated $70,000 for building, completing, equipping, and outfitting complete for service a new steam tender for use in shoal and inland waters. This tender is being built under a contract which provides that she shall be finished within a year. She is a schooner-rigged steel steamer of 900 tons displacement. She meaures 190 feet over all, with 173 feet 4 inches load water line, has 30-foot beam, 12-foot draft, 12½-knot speed, and 1,000 horsepower. Her machinery consists of 2 triple-expansion inverted, direct-acting engines driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch by 2 Scotch boilers 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys, now being practically tested by the Board.

SEVENTH DISTRICT.

This district extends from a point just south of Jupiter Inlet light-station to and includes Perdido Entrance, Florida. It embraces all aids to navigation on the sea and Gulf coasts of Florida and on other tidal waters tributary to the sea and Gulf between the limits named; also waters pertaining to the United States naval reservation at Guantánamo, Cuba, which were transferred from the Third light-house district to the Seventh light-house district by the Light-House Board at its session on May 1, 1905.

Inspector.—Commander John Hood, U. S. Navy.

Engineer.—Maj. William E. Craighill, Corps of Engineers, U. S. Army.

There are in this district:

Light-houses and lighted beacons	100
Day or unlighted beacons	72
Whistling buoys in position	9
Bell buoys in position	7
Other buoys in position	293
Steamers *Laurel* and *Mangrove*, buoy tenders, and for supply and inspection	2
Steamer *Arbutus* and *Ivy*, for construction and repair in the Seventh and Eighth districts	2

LIGHT-STATIONS.

1063. Hillsboro Inlet, between Jupiter Inlet and Fowey Rocks, Atlantic coast of Florida.—The act approved on February 12, 1901, authorized the establishment of a first-order light at or near Hillsboro Point, Florida, at a cost not exceeding $90,000, and the act approved on June 28, 1902, appropriated $45,000 therefor. The act approved on March 3, 1903, appropriated $25,000, and the act approved on March 3, 1905, appropriated $20,000 more, making $90,000 in all available. The station was built and the light was installed in March, 1907. The structure is an octagonal, pyramidal, iron skeleton tower with central stair cylinder; the lower third of the structure is painted white; the upper two-thirds and the lantern are painted black. There are three white one-and-one-half story light-keepers' dwellings in a row, about 100 feet to the northward of the light tower and a red brick oilhouse stands about 50 feet to the westward of the tower. There is also a boathouse near the inlet with boatways 60 feet long.

1069. Cape Florida Shoal light, Hawk Channel, Florida.—A beacon was built in the same location as the former structure, destroyed by storm. It is a red, square platform, with " C. F." in white on each side, on four iron-cased piles, surmounted by a red oilhouse and a post with an elliptical day mark of horizontal slats. It was run into and damaged by a passing vessel. The braces and lower struts were renewed.

1073. Hen and Chickens light, Hawk Channel, Florida.—A new red, square, pyramidal structure was built, covered with horizontal slats, on four iron-cased piles, with "H. C." in white on each side of the case of the platform, supporting a fixed red lens-lantern light 31 feet above the water, on the same location as the former structure, which was destroyed by storm. It was again blown down by storm in October, 1906, and has not yet been rebuilt.

1074. East Turtle Shoal light, Hawk Channel, Florida.—A new, black, square, pyramidal structure was built, covered with white horizontal slats, on four iron-cased piles, with "E. T." in white on four sides of the base of the platform, supporting a fixed white lens-lantern light 31 feet above the water, in the same location as the former structure, which was destroyed by storm.

1075. East Washerwoman Shoal light, Hawk Channel, Florida.—A new, black, square, pyramidal structure was built, with the upper part covered with white horizontal slats, on four iron-cased piles, with "E. W." in white on four sides of the base of the platform, supporting a fixed white lens-lantern light 30 feet above the water, in the same location as the former structure, which was destroyed by storm.

1076. Bahia Honda light, Hawk Channel, Florida.—A new, red, square, pyramidal structure was built, covered with horizontal slats, on four iron-cased piles, with "B. H." in white on each side of the base of the platform, supporting a fixed red lens-lantern light 30 feet above the water, in the same location as the former structure, which was destroyed by storm. Only the foundation piles were driven with sleeves on them. The beacon has not yet been rebuilt.

—. *Cape Romano, on the island forming that cape, about 33 miles southeast from Sanibel Island, Florida.*—The following statement, made in the Board's last six annual reports is renewed:

The Gulf coast of Florida between Sanibel Island and Key West, something over 100 miles, is without a single light. There is a quite a large commerce carried on between Florida ports above Sanibel Island and Key West and Cuba, using the route along the west coast of Florida, and a light at Cape Romano would be of great benefit. The island forming the cape was reserved for lighthouse purposes by the Executive order dated January 9, 1878.

The following is a copy of a letter dated January 10, 1901, from the Secretary of the Treasury to the Speaker of the House of Representatives, quoted from the Board's last two annual reports:

At the instance of the Light-House Board this Department has the honor to state that the interests of commerce and navigation seem to make necessary the establishment of a light-house at Cape Romano, on the western coast of Florida.

The reasons for the necessity for this light are that there is a stretch of coast over 100 miles in length between Sanibel Island and Key West, Fla., without a single light. There is quite a large commerce carried on between Florida ports above Sanibel and Key West and Cuba, using the route along the west coast of Florida.

The estimated cost of establishing a light-house at Cape Romano is $35,000.

This Department therefore has the honor to recommend that an appropriation of $35,000 be made at the present session of Congress for the establishment of a light-house at Cape Romano, Florida.

On account of the increased cost of steel and other materials this estimated cost should now be increased about 30 per cent, or to $45,000, and the Board recommends that an appropriation of this amount be made therefor.

1091. Sanibel Island, Gulf coast of Florida.—Some 110 feet of wharf 8 feet wide was built, with a landing platform connected to it by steps. A boathouse was built. Various repairs were made.

1095. Mangrove Point light, Florida.—A new, black, square, pyramidal structure was built. Its upper part is covered with horizontal slats, on four iron-cased piles. It takes the place of the old structure, which was torn down and removed. It bears a fixed white lens-lantern light 29½ feet above the water.

1105. North Cut lower light, Tampa Bay, Florida.—An effort was made to build this beacon at a new place, nearer the channel, using a small schooner in connection with the work. The water was so deep and the cross currents so strong that it was impracticable to hold the vessel in place while driving the piles. The materials were therefore stored at Egmont Key light-house depot, and the schooner was discharged. The light will be built by a light-house tender, when one is available.

1147. Deer Point light, Pensacola Bay, Florida.—A temporary light was displayed, pending the erection of a new lighted beacon in place of the one destroyed by storm.

1149. Caucus Cut and Fort McRee Cut-off ranges, front for both, Pensacola, Fla.—The beacon, destroyed by storm, was rebuilt on the old location. A platform was built at the base of the beacon, surmounted by a lamphouse.

1151. Fort Barrancas Range front light, Pensacola Bay, Florida.—A new beacon was built, to replace the one destroyed by storm, on the same site as the old one. Various repairs were made.

1152. Fort Barrancas Range front light, Pensacola Bay, Florida.—A new beacon was built on the foundation of the one destroyed by storm. It is a square pyramid covered with horizontal slats on the seaward face, and painted white.

DAY OR UNLIGHTED BEACONS.

Florida Reef beacon "W."—A new white iron spindle beacon was built, 36 feet high, with a basket showing the letter "W" on three faces, in the same location as the former beacon, at the north end of the Florida Reefs. It was again knocked down by storm. The materials for rebuilding it were purchased and it will be rebuilt soon.

Florida Reef beacon "J."—A new beacon was built on Elbow Reef, in same location as former structure. It is a white iron spindle 36 feet high, supporting an iron basket showing the letter "J" on three faces.

Florida Reef beacon "M."—A new beacon was built on Ajax Reef, in the same location as the former beacon. It is a white iron spindle 36 feet high, showing the letter "M" on three faces of an iron basket supported by the spindle.

Florida Reef beacon "L."—A new beacon was built on Pacific Reef, in the same location as the former beacon destroyed by storm. It is a white iron spindle, 36 feet high, bearing an iron basket showing the letter "L" on three faces.

Florida Reef beacon "D."—A new beacon was built on Crockers Reef, in the same location as the former structure destroyed by storm. It is a white iron spindle, 36 feet high, bearing an iron basket showing the letter "D" on three faces.

Florida Reef beacon "G."—A new beacon was built on French Reef in the same location as the former beacon destroyed by storm. It is a white iron spindle, 36 feet high, supporting an iron basket showing the letter "G" on three faces.

Four-Foot Shoal, Hawk Channel, Florida.—A new beacon was built in the same location as the former structure. It is a square, black, pyramidal, wooden structure, the upper part covered with white horizontal slats, showing "D. H.", in white on the base of the platform.

Jacobs Harbor Heads beacon, Hawk Channel, Florida.—A new beacon was built on the same location as the former structure. It is a red, square, pyramidal structure, the upper part covered with horizontal slats, on four iron-cased piles, and showing "J. H. H." in white on the base of the platform.

LIGHT-HOUSE DEPOTS.

Key West, Fla.—This is the principal depot of the district. Stores of various kinds are kept here for distribution among the light-stations. The district blacksmith shop is here, where much work is done for light-stations. Minor repairs were made.

Egmont Key, entrance to Tampa Bay, Florida.—Buoys and coal for the vicinity are kept here in sheds prepared for the purpose. The sheds and wharf are in fair condition.

LIGHT-HOUSE TENDERS.

Ivy.—This steel, twin-screw steamer, of 550 tons gross burden, was built in 1904, and was used but a portion of the year in this district. She made one trip to Guantanamo Bay, Cuba, and located the two lights on Corinaso and Fisherman points, and delivered materials for the structures. She delivered materials for repairs to Sanibel Island, Cape San Blas, and St. Joseph Point light-stations, and for the beacons in Hawk Channel, and the illuminating apparatus for Hillsboro Inlet light-station. She made two trips of inspection to the lights in Pensacola Bay, and one trip of inspection to all of the lights in the Seventh light-house district. She took the machinist and his party to American Shoal light-station, and brought him back from Cape San Blas light-station to Mobile on another occasion. The report of miles steamed and coal consumed will be found in the report for the Eighth light-house district, where the tender was engaged the greater part of the year.

Arbutus.—This wooden, twin-screw steamer, of 400 tons gross burden, built in 1879, spent most of the year in this district, in connection with work on the Florida Reef light-stations, the iron spindle beacons on Florida Reefs, and the beacons in Hawk Channel, Florida. She delivered materials and assisted in repairs at American Shoal, Fowey Rocks, Alligator Reef, Carysfort Reef, and Sombrero Key light-stations. She delivered material for the boat ways at Hillsboro Inlet light-station, and delivered materials and helped to build iron spindle beacons "W," "J," "M," "L," "G," and "D," and wooden beacons at Jacobs Harbor Heads, Four-Foot Shoal, East Turtle Shoal, Bahia Honda, Hen and Chickens Shoal, East Washerwoman Shoal, and Cape Florida Shoal. She took the lens apparatus to Cape

San Blas light-station, made a trip to Pensacola Bay and assisted in erecting Fort McRee Range front and rear lights, and was used in inspecting the condition of the lights in the Seventh light-house district, after the storm in September, 1906. Her port propeller, which worked loose while she was at Miami, Fla., was replaced and secured by the crew. The tender steamed some 12,400 miles and consumed about 851 tons of coal during the year. Various repairs were made.

Mangrove.—This steel twin-screw steamer, of 392 tons gross burden, was built in 1897. From July 14, 1906, to April 25, 1907, she was under repair. During the rest of the year she was used for buoyage, delivering supplies to light-stations, and for quarterly inspections. She relieved or replaced 29 buoys, discontinued 1, and recovered one. Her crew worked 12 days at the light-house depots, and cleaned and painted 52 buoys. The *Mangrove* steamed some 6,905 nautical miles, and consumed about 649 tons of bituminous coal. The tender was thoroughly overhauled, extensive repairs were made to her hull, boilers, and machinery at the League Island Navy-Yard. She left Edgemoor, Del., for her station on April 15, 1907. Since that date she steamed some 5,065 miles, doing inspection, buoy, and supply work, and distilled nearly all the water used, consuming about 452 tons of bituminous coal.

Laurel.—This wooden, twin-screw steamer, of 320 tons gross burden, was built in 1876. She was employed in attending to buoyage, delivering supplies to light-stations, and for quarterly inspections. She relieved or replaced 203 buoys, established 9, discontinued 5, and recovered 7. Her crew worked 61 days at the light-house depots, and cleaned and painted 322 buoys. The *Laurel* steamed some 12,698 miles, and consumed about 677 tons of bituminous coal. She is so old and frail that she is beyond economical repair, and it is not unlikely that she will, on survey, be condemned, and that her sale will be ordered in the near future.

Hibiscus, new tender for the use of the inspector of the Seventh light-house district.—The act approved on March 4, 1907, appropriated $200,000 for this purpose. The tender is now being built under contract, which provides that she shall be finished within the year. She is a schooner-rigged steel steamer of 900 tons' displacement. She measures 190 feet over all, with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion, inverted, direct-acting engines driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch, by two Scotch boilers, 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys which are now being practically tested by the Board.

Maple.—This tender was borrowed from the Fifth light-house district and worked in this district from December 16, 1906, to February 9, 1907. During this time she was engaged in the delivery of supplies to light-stations and for inspection duty. The report of distances steamed and coal consumed appears in the report for the Fifth light-house district.

HIRED VESSELS.

Schooner Ellen C.—This schooner was used but a short time in the Seventh light-house district. She delivered materials for East Washerwoman Shoal and Bahia Honda beacons and was used during a part of the time while the beacons were being rebuilt.

Schooner Ariel.—This schooner was used about four months in this district. She delivered materials and assisted in building Mangrove point beacon and in the attempt to build North Cut lower light, No. 10, in Tampa Bay; but being too small for the work, she was discharged from the light-house service.

NAVAL RESERVATION AT GUANTANAMO, CUBA.

The act approved on March 3, 1905, appropriated $25,000 and the act approved on June 3, 1906, appropriated $6,000 for maintaining existing aids to navigation, to establish and maintain additional lights, daymarks, and beacon lights required; to build a light-house depot, with dock, buoy shed, custodian quarters, and an oilhouse, including the purchase of land therefor. Under these acts there were built—

—. *Fisherman Point Range front light, Cuba.*—This new beacon built on Fisherman Point consists of a red mast surmounted by a circular daymark of horizontal slats, and bearing a fixed red lens-lantern light 20 feet above the water.

—. *Fisherman Point Range rear light, Cuba.*—This new beacon was built on land at Corinaso Point. It consists of a white mast, with a white circular daymark, bearing a fixed white lens-lantern light 35 feet above the water.

1352. Windward Point, easterly side of entrance to Guantanamo Bay, Cuba.—Some repairs were made to the dwelling. The bridge across the road leading to the dwelling was repaired.

The following statement, made in the Board's last annual report, is renewed:

> The Board estimates that it will cost $8,000 to maintain the light-house service at Guantanamo, Cuba, during the next fiscal year, and it recommends that an appropriation of this amount be made therefor.

EIGHTH DISTRICT.

This district extends from but does not include Perdido Entrance, Florida, to the southern boundary of Texas. It embraces all aids to navigation on the Gulf coast of the United States and tidal waters tributary to the Gulf between the limits named, together with those on the Mississippi River below New Orleans, and on Grand Lake and Lake Chicot.

Inspector.—Commander James H. Sears, U. S. Navy, to July, 1907, since then Commander Guy W. Brown, U. S. Navy.

Engineer.—Maj. William E. Craighill, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights, including 32 post lights on the Mississippi River, Grand Lake, and Lake Chicot	137
Light-vessels in position	3
Day or unlighted beacons	78
Fog-signals operated by steam	3
Fog-signals operated by clockwork	13
Gas-lighted buoys in position	8
Whistling buoys in position	5
Bell buoys in position	6
Other buoys in position	116
Steamer *Magnolia*, buoy tender, and for supply and inspection	1
Steamers *Arbutus* and *Ivy*, for construction and repair in the Seventh and Eighth districts	2

DAMAGES BY HURRICANE.

In October, 1906, much damage was done by hurricane to the light-houses of the district. The matter having been brought to the attention of Congress, appropriation was made in the urgent deficiency act approved on December 19, 1906, of $69,000, and made immediately available. This sum was expended in "rebuilding, repairing, and re-establishing such aids to navigation and buildings connected therewith, in the Eighth light-house district as were damaged or destroyed by the hurricanes of October last, 1906," details of which are given in the following pages, under appropriate heads.

LIGHT-STATIONS.

1160. Sand Island Range front, entrance to Mobile Bay, Alabama.—Some 525 tons of ballast rock was placed around the foundation of the light tower and dwelling. A storm destroyed the dwelling, drowned the assistant keeper and his wife, and damaged the light tower. The lantern glass was replaced, the lens was repaired and adjusted, and the original characteristic of the light was restored. The fog-signal which was swept away is to be replaced soon with a new one to be operated by compressed air. Various repairs were

made. Materials for new wharves, boathouse and landings were delivered, and the work of emplacement was begun. It is estimated that a proper keeper's dwelling to replace the one destroyed at this station can be built for not exceeding $6,500, and the Board recommends that an appropriation for that amount be made therefor.

1161. Sand Island Range rear, on Sand Island in the rear of the main light, Mobile Bay entrance, Alabama.—These beacons were swept away by storm. New structures were built. They are two white, square houses, each on a square platform on nine piles, and surmounted by a lantern support. Each bears a fixed white lens-lantern light 44 feet above the water.

1163. Mobile Point Beacon, easterly side of Mobile Bay entrance, Alabama.—This beacon was swept away by storm. A temporary one was built consisting of four posts boarded up on the channel face, supporting a platform on which a lantern stood. Afterwards a beacon was built 700 feet from the rear light on the same range. It is a red mast with red circular daymark, standing on mud sills, and bearing a fixed white lens-lantern light 27 feet above the water.

MOBILE SHIP CHANNEL LIGHTS.

1164. Middle Ground, Alabama.—A new beacon was built to replace the one destroyed by storm. It is a red square house, with "M. G." in white on three sides, on a square platform on nine piles, and surmounted by a lantern support. It bears a fixed white lens-lantern light 34 feet above the water. The illuminant is acetylene gas.

1165. Light M. G. A., Alabama.—Two ladders were made and placed and a lamp house was built. As the beacon was destroyed by storm, a new one was built. It is a red square house, with "M. G. A." in white on three sides, on a square platform on nine piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above the water. The illuminant is acetylene gas.

1166. Light No. 2, Alabama.—Two ladders were installed and the lamp house was rebuilt. As the beacon was swept away in a storm, a new one was built. It is a red square house, with "2" in white on three sides, on a square platform on nine iron-cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above water. The illuminant is acetylene gas.

1167. Light No. 2 A, Alabama.—A new beacon was built to replace the one destroyed by storm. It is a red square house, with "2 A" in white on three sides, on a square platform on nine iron-cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above the water.

1168. Light No. 4, Alabama.—Two ladders were installed and the lamp house was altered. As the beacon was destroyed by storm, a new one was built. It is a red square house, with "4" in white on three sides, on a square platform supported on nine iron-cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above the water.

1169. Light No. 4 A, Alabama.—A new beacon was built to replace the one swept away by storm. It is a red square house, with "4 A" in white on three sides, on a square platform supported on nine iron-

cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above the water.

1170. Light No. 6, Alabama.—Two ladders were installed. A foundation was built, with new braces and platform, adjoining the former structure, the superstructure was lifted and placed on the new foundation. A new gas generator was installed.

1171. Light No. 6 A, Alabama.—A new beacon was built to replace the one destroyed by storm. It is a red square house, with "6 A" in white on three sides, on a square platform on nine iron-cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light 34 feet above the water.

1172. Light No. 8, Alabama.—Two new ladders were installed and minor repairs were made.

1173. Light No. 8 A, Alabama.—A new beacon was built to replace the one destroyed by storm. It is a red square house, with "8 A" in white on three sides, on a square platform on nine iron-cased piles, and surmounted by a lantern support. It bears a fixed red lens-lantern light, 34 feet above the water, with a fixed white lens-lantern light 4 feet below the red.

1175. Light M. B. A., Alabama.—A new beacon was built to replace the one carried away by storm. It is a red square house, with "M. B. A." in white on three sides of the house, on a square platform on four iron-cased piles, and is surmounted by a pyramidal, horizontally-slatted lantern support. It bears a fixed red lens-lantern light, 34 feet above the water, with a fixed white lens-lantern light 4 feet below the red.

1177. Light No. 10 A, Alabama.—A new beacon was built to replace the one carried away by storm. It is a red square house, with "10 A" in white on three sides, on a square platform on four piles, and surmounted by a pyramidal, horizontally-slatted lantern support, and bearing a fixed red lens-lantern light 34 feet above the water.

1178. Light No. 12, Alabama.—Two new ladders were installed. Minor repairs were made.

1179. Light No. 12 A, Alabama.—A new beacon was built to replace the one carried away by storm. It is a red square house, with "12 A" in white on three sides, on a square platform on four piles, and surmounted by a pyramidal, horizontally-slatted lantern support, and bearing a fixed red lens-lantern light 34 feet above the water.

1181. Light No. 14 A, Alabama.—A new beacon was built to replace the one carried away by storm. It is a red square house, with "14 A" in white on three sides, on a square platform on four iron-cased piles, and surmounted by a pyramidal, horizontally-slatted lantern support. It bears a fixed red lens-lantern light 34 feet above the water.

1182. Light No. 16, Alabama.—A new acetylene gas generator was installed, and minor repairs were made.

1188. Choctaw Pass Channel Rear, Alabama.—The old beacon was removed and a new red, square, pyramidal wooden beacon, upper part covered with horizontal slats, on nine iron-cased piles, was built in the same position as the former structure. It was damaged by storm, and repairs were made to it and a new house built on the platform.

1189. Battery Gladden, on the ruins of Battery Gladden, Mobile Bay, Alabama.—A T-head was built at the end of the wharf, with a platform under it. A boathouse was built. Some 205 feet of walk 9 feet wide, and 125 feet of walk 5 feet wide, was built. A brick carbide house 20 by 30 feet in plan, with galvanized-iron roof and three ventilators in it, one large door in the end, with cement floor covered by a wooden floor, was built. Stairs were built from the wharf to rock piles around the foundation and various repairs were made.

1194. Horn Island, westerly side of Horn Island Pass, entrance to Mississippi Sound, Mississippi.—Under the special appropriation of $10,000 made by the act approved on March 4, 1907, for a new light-station to replace the one destroyed in storm of September 27, 1906, the plans for the new station were prepared, and work will be started at an early date. It is proposed to build the station by hired labor. The site has been selected.

1195. Round Island, Mississippi Sound, Mississippi.—The assistant keeper's dwelling was practically rebuilt. Some 190 feet of board walk 2 feet wide was built, as was quite a length of brick walk, and about 300 feet of wharf with a T-head. A boathouse was built. Some 1,236 feet of picket fence 5 feet high, with a gate, was set up. A drainage ditch 125 feet long and 2 feet wide was dug. Various minor repairs were made.

1196. Round Island South Spit, Mississippi Sound, Mississippi.—A new beacon was built to replace the one destroyed by storm. It is a black, square, four-pile structure, with a square platform supporting a house and pyramidal top-work covered with horizontal slats, bearing a fixed white lens-lantern light 37 feet above the water.

1197. Round Island Spit, Mississippi Sound, Mississippi.—A new beacon was built to replace the one destroyed by storm. It is a brown, square, four-pile structure, with a platform supporting a house, and pyramidal top-work covered with horizontal slats, and bearing a fixed red lens-lantern light 30 feet above the water.

1198. Pascagoula River Range front, Mississippi.—The piles for a new beacon were driven and the iron sleeves and braces were put on them.

1199. Pascagoula River Range rear, Mississippi.—The piles for a new beacon were driven and the iron sleeves and braces were put on them.

1200. Pascagoula River Entrance "A," Mississippi.—A new beacon was built to replace the one destroyed by storm. It is a red, square, four-pile structure, with a platform supporting a house and pyramidal top work covered with horizontal slats, and bearing a fixed red lens-lantern light 35 feet above the water.

1201. Pascagoula River Entrance "B," Mississippi.—A new beacon was built to replace the one destroyed by storm. It is a red, square, four-pile beacon with a platform supporting a house and pyramidal top work covered with horizontal slats. It bears a fixed red lens-lantern light 35 feet above the water.

1206. Pascagoula River East Bank, Mississippi.—A new beacon was built to replace the one destroyed by storm. It is a red single pile with topmast supporting a latticework daymark, and with a lampbox on the platform at the base. The plank walk leading to the river bank was rebuilt.

1207. Pascagoula River West Bank, Mississippi.—A new beacon was built to replace the one carried away by storm. It is a black single pile, surmounted by a topmast, bearing a latticework daymark, and having a lamphouse on a platform at the base. The plank walk to the river bank, about 50 feet long by 2 feet wide, was rebuilt.

1208–1209. Bayou Chammier Range, Mississippi.—These two beacons were rebuilt in the same locations. They are black single piles, surmounted by topmasts, with latticework daymarks, and having lamphouses on platforms at the base. The front light is 12 feet and the rear light 26 feet above the water.

1210–1211. Lowry Island Range, Mississippi.—These beacons were rebuilt. They are black single piles, surmounted by topmasts, with latticework daymark, and with a lamphouse on a platform at the base. The front light is 19 feet and the rear one 26 feet above the water.

1213–1214. South Channel Range, Mississippi.—Minor repairs were made to the front light. A new beacon was built to replace the rear one, which was destroyed by storm. It is a brown mast, surmounted by a brown circular daymark of horizontal slats, and bearing a fixed red lens-lantern light 43½ feet above the water.

1219. Biloxi, Mississippi Sound, Mississippi.—A wharf 842 feet long and 6 feet wide was built. Piles were driven under the boathouse, and a platform was built around it connecting it with the wharf. Some 450 feet of new fence was built. A new bath and boat house was built. The rock around the light tower was replaced. Various repairs were made.

1220. Gulfport Channel, No. 1, Mississippi.—The piles for a new beacon were driven and the iron sleeves and braces put on them.

1221. Gulfport Channel, No. 2, Mississippi.—The foundation piles were driven and the sleeves and braces put on them.

1222. Gulfport Channel, No. 4, Mississippi.—The piles for the new beacon were driven and the sleeves and braces put on them.

1223. Gulfport Channel, No. 6, Mississippi.—The piles for the new beacon were driven and the iron sleeves and braces put on them.

1224. Gulfport Channel, No. 8, Mississippi.—The piles were driven and the iron sleeves and braces were put in place.

1225. Gulfport Channel, No. 10, Mississippi.—The piles were driven and the iron sleeves and braces were put in place.

1251. Southwest Pass, entrance to the Mississippi River, Louisiana.—Under the appropriation of $12,000 made by the act approved on June 30, 1906, for three keepers' dwellings, a site was selected and the preliminary plans for the buildings were made and work on the detail plans and specifications was begun.

1300. Sabine Pass, entrance to Sabine Pass, Louisiana.—A wooden platform and some 1,497 feet of plank wharf 8 feet wide were built, with a T-head, with boatways. A small wharf was built in the bayou. Some 65 feet of plank walk 4 feet wide with steps was laid.

1299. Sabine Pass East Jetty, Gulf of Mexico, Louisiana.—The following recommendation, made in the Board's last seven annual reports, is renewed:

The protecting mat of the east jetty extends out about 4 miles, and the nearest light to its entrance is a small beacon light about 1½ miles inside the end, too far inside to serve as a guide to the entrance of the jetty. Sabine Pass as a

port of entry has grown rapidly. The receipts and shipments for 1896 and 1897 show an increase from $199,042 in 1896 to $475,288 in 1897. It appears from the records that 99 vessels entered and cleared during 1897; that there were 403 trips made, and that 104,333 was the net registered tonnage. The largest vessel which passed out drew 23.6 feet. The Board therefore deems that the needs of this port require the establishment here of a light and fog-signal. It is estimated that a suitable structure here, similar to the one at Brazos Santiago, Texas, can be built for $40,000. It is therefore recommended that an appropriation of this amount be made therefor.

The House of Representatives Committee on Appropriations called for suggestions from the Treasury Department as to the propriety of passing H. R. bill No. 11357, appropriating $40,000 for the establishment of a light-house at Sabine Pass, and was informed by letter of February 9, 1899, that the Treasury Department recommended the passage of the bill in question.

1302. Galveston Jetty, Gulf of Mexico, Texas.—The act approved on June 11, 1896, appropriated $35,000 for establishing a light and fog-signal at or near the outer end of one of the jetties at Galveston Harbor, Texas, and changing the characteristics of the Bolivar Point light at the entrance of that harbor. Great difficulty, occasioning much delay, was experienced in determining the precise site and in building this submarine foundation. Meantime the cost of labor and material has been largely increased. The Board estimates that it will cost not exceeding $10,000 to complete this structure, and it recommends that an appropriation of that amount be made therefor.

1310. Second Turn, Galveston Bay, Texas.—A red, square, pyramidal wooden structure was built, the upper part covered with horizontal slats, on four iron-cased piles. Before the beacon could be lighted, it was knocked down by a tug with barges, and it has not yet been rebuilt.

1311. Hitchcock Reef, Galveston Bay, Texas.—A red, square, pyramidal wooden structure was built, the upper part covered with horizontal slats, supported on four iron-cased piles, in 3 feet of water on the easterly side of Pelican Spit, Galveston Bay, Texas.

1312. East Bank, Galveston Bay, Texas.—A black, square, pyramidal wooden structure was built, the upper part covered with horizontal slats, on iron-cased piles, in 6 feet of water, on the easterly side of the channel in Galveston Harbor, Texas.

1313. Texas City Channel, No. 1, Texas.—A black, square, pyramidal wooden structure was built, its upper part covered with horizontal slats, on four iron-cased piles, showing "T. C. 1" in white on three sides of the house, in 25 feet of water, on the southerly side of the easterly entrance to the dredged channel in Galveston Bay.

1314. Texas City Channel, No. 3, Texas.—A black, square, pyramidal wooden structure was built, its upper part covered with horizontal slats, on iron-cased piles, with "T. C. 3" in white on three sides of the house, in 9½ feet of water, on the southerly side of the dredged channel from Bolivar Point to Texas City.

1316. Galveston Bay Channel, No. 1, Texas.—A black, square, pyramidal wooden structure was built, its upper part covered with horizontal slats, on four iron-cased piles, with "G. B. 1" in white on three sides of the house, in 9 feet of water, on the westerly side of the dredged channel from Bolivar channel to Red Fish bar, Galveston Bay.

1317. Galveston Bay Channel, No. 3, Texas.—A black, square, pyramidal wooden structure was built, its upper part covered with

horizontal slats, on four iron-cased piles, with " G. B. 3 " in white on three sides of the house, in 8½ feet of water, on the westerly side of the channel from Bolivar channel to Red Fish bar, Galveston Bay.

DAY OR UNLIGHTED BEACONS.

Great Point Clear.—The daymark was pulled down and destroyed.

Halfmoon Shoal, Texas.—The light was removed from the structure, and it was left standing as a daymark.

Mobile River Range rear, Alabama.—The beacon was rebuilt 740 feet farther from the front beacon, on the same range.

LIGHT-VESSELS.

1246. South Pass light-vessel, No. 43, entrance to the Mississippi River, Louisiana.—This composite light-vessel was built in 1880 and 1881, is of about 187 tons gross burden, shows two fixed white lights, and has a 12-inch steam whistle for a fog-signal. On August 3, 1906, this vessel was withdrawn from her station and repaired. On November 27, 1906, she was replaced on her station.

1301. Heald Bank light-vessel, No. 81, Gulf of Mexico, Texas.—This steel, steam, self-propelling light-vessel was built in 1904 and 1905, is about 465 tons gross burden, shows two fixed white lights, and has a 12-inch steam whistle for a fog-signal. On November 26, 1906, she steamed to New Orleans, where she was docked and repaired. She returned to her station on December 23, 1906, when the gas buoy temporarily marking the position was withdrawn.

Galveston light-vessel, No. 28, Galveston, Tex.—This wooden light-vessel, which was rebuilt in 1881 and is of about 101 tons burden, was laid up at Galveston, Tex., with a master and cook on board. A 25-foot cabin launch, with a 5-horsepower motor, was furnished this vessel.

FOG-SIGNALS OPERATED BY STEAM OR OTHER ENGINES.

1246. South Pass light-vessel, No. 43, Louisiana.—The 12-inch steam whistle was in operation about 519 hours and consumed some 32 tons of bituminous coal.

1297. Sabine Bank, Louisiana.—This first-class Daboll trumpet was in operation some 147 hours and consumed about 66 gallons of mineral oil.

1301. Heald Bank light-vessel, No. 81, Texas.—The 12-inch steam whistle was in operation about 53 hours and consumed some 56 tons of bituminous coal.

BUOYAGE.

The buoyage of this district is in fair condition.

LIGHT-HOUSE DEPOTS.

Port Eads, Louisiana.—A full supply of stores for the tender *Magnolia*, the light-vessels and light-stations, are stored here; also a supply of spare buoys, chains, sinkers, etc., for the district. The hur-

ricane damages were repaired. The depot keeper, with a hired power boat, delivered the annual supplies to the 13 light-stations in Lakes Borgne and Pontchartrain. The damage done to the depot by the German steamship *Hohenfelde* was repaired at the expense of the owners of the vessel.

Mobile, Ala.—The damage from storm was repaired. The floor in buoy shed was relaid after the stringers and floor joists had been repaired. The girders were replaced. One end of the shed was brought back to plumb. Six double doors were made and hung on sliding hangers. Various minor repairs were made. Spare buoys are kept here.

San Jacinto, Galveston Harbor, Texas.—The following recommendation was made in the Board's last five annual reports:

It has been found by experience that a light-house tender can not, without dangerously overloading, carry from the nearest light-house depot, at Port Eads, La., the buoys, accessories, and other supplies needed for the proper care of the lower coast. A depot here has become necessary at which to keep spare buoys and light-house supplies. The War Department, by letter of December 29, 1900, to the Treasury Department, permitted the Light-House Establishment to occupy, for light-house purposes, at Fort San Jacinto, Tex., Military Reservation, in Galveston Harbor, a certain area described by metes and bounds, and shown on a blueprint which accompanied that letter. It is estimated that this light-house depot can be established for $18,000, and the Board recommends that an appropriation of this amount be made therefor.

The following appeared in the Board's last annual report:

On account of the urgent necessity for some accommodation at this point for cleaning and painting buoys, it is now proposed to put up a simple wharf, which will serve the present purposes, instead of the large wharf with buoy shed previously contemplated, which it is estimated can be done for about $5,000. The Board therefore recommends that an appropriation of $5,000 be made therefor, instead of $18,000 as recommended in the Board's last three annual reports.

The following is an extract from a joint report dated August 4, 1907, made by the inspector and engineer of the Eighth light-house district:

The necessity for a covered buoy wharf at Galveston is now more urgent than ever. There are 6 gas buoys, 3 bell buoys, a whistling buoy, 3 first-class cans, and a first-class nun now in position in Galveston entrance and harbor; and on account of their size it is extremely difficult to transport spare buoys to these stations and absolutely necessary to keep a spare set, together with the necessary appendages, at Galveston. It is believed that an appropriation in the full sum of $18,000 originally recommended should be requested, in order that proper accommodations may be had.

The Board therefore states that it is now estimated that this work will cost not to exceed $18,000, and recommends that this amount be appropriated therefor.

LIGHT-HOUSE TENDERS.

Arbutus.—This wooden, twin-screw steamer of 400 tons gross burden was built in 1879. She assisted in the work of repairing Mobile ship channel beacons, in driving piles for 3 beacons, and in assisting to place temporary lights on the channel after the storm in September of 1906. She delivered materials and assisted in the work at Sand Island Range light-station. The report of miles steamed and coal consumed during the year will be found in the report for the Seventh district.

Ivy.—This steel, twin-screw steamer of 550 tons gross burden was built in 1904. She delivered materials for 3 beacons in Galveston Bay, Texas, and after the beacons were built assisted in installing acetylene generators on 7 beacons. She delivered materials for repairs to Sabine Pass, Sand Island Range, and Chandeleur light-stations, and for the erection of South Channel Range rear and Mobile Point beacons. She was used in connection with rebuilding light No. 6 and Choctaw Pass channel rear light, Mobile Bay, and in installing acetylene generators on 6 of the new beacons in Mobile Bay. She made seven trips of inspection to the lights in Mobile Bay, one trip of inspection to all the lights in the Eighth light-house district, two trips as far as New Orleans, and several other trips to lights in the Mississippi Sound and as far as Galveston. She took the machinist to Ship Shoal and Oyster Bayou light-stations, Louisiana, and to Sabine Bank and Bolivar Point light-stations, Texas. She was docked and her bottom painted and a new set of wheels put on her. She steamed about 19,105 miles and consumed some 2,145 tons of coal during the year.

Magnolia.—This steel, twin-screw steamer, which was built in 1904, is of 550 tons gross burden. She attended to the buoys, delivered fuel, provisions, and supplies to the light-houses and light-vessels, and conveyed the inspector to the light-house on his visits of inspection. She towed South Pass light-vessel, No. 43, from her station to New Orleans and back. She cleaned and painted 181 buoys, changed 98, established 10, discontinued 2, replaced 20, and recovered 10 buoys. She relieved, replaced, and relighted 6 gas buoys in Galveston Harbor, and established and discontinued a gas buoy to mark Heald Bank light-vessel station when that vessel was removed for repairs. She delivered 2 mushroom anchors, 15 tons of coal, and 12,000 gallons of fresh water to Heald Bank light-vessel, No. 81, while that vessel was on her station, and 3,000 gallons fresh water to Sabine Bank light-station. She transported the annual supplies and 29,180 gallons of mineral oil, weighing 335,000 pounds, from New Orleans to the Port Eads light-house depot and delivered them to light-stations. She transported empty oil cans to New Orleans and Mobile for shipment to the Third light-house district. She transported the chain, buoys, and their appendages, weighing 162,000 pounds, received in five shipments from the Third light-house district, from New Orleans to the Port Eads light-house depot. She also delivered 58 sacks of coal and 12 cords of wood to light-stations. The tender steamed some 11,571 miles and consumed about 1,530 tons of coal.

Tender Camellia for use of the inspector of the Eighth light-house district in shoal and inland waters.—The act approved on February 26, 1907, appropriated $60,000 for this tender. Detailed plans and specifications are being prepared for her. She is to be a steel, steam, twin-screw vessel of about 400 tons displacement.

HIRED VESSELS.

Schooner Ariel.—This schooner was engaged for aiding to rebuild Choctaw Pass Channel Range rear lights.

Schooner Louis Dodson.—This schooner was engaged about two months aiding in building three beacons in Galveston Bay, Texas.

Schooner Eureka.— This schooner was hired for about six weeks. She was used in repairing Bayou Lacombe and Bayou Bonfuca beacons, Louisiana.

Schooner Sidney.—This vessel was hired for about three weeks. She delivered materials for repairs to Round Island light-station, Mississippi.

Schooner Ellen C.—This schooner was employed for about six months. She aided in rebuilding and repairing the beacons in Mobile Bay which were destroyed or damaged by storm.

Schooner Axel.—This schooner was employed for about four months aiding in rebuilding and repairing the beacons in Mobile Bay which had been destroyed or damaged by storm.

NINTH DISTRICT.

s district includes all aids to navigation on Lake Michigan, Bay, and tributary waters lying west of a line drawn across raits of Mackinac just east of old Mackinac Point light-station, gan.

ector.—Commander John M. Orchard, U. S. Navy.

ineer.—Maj. William V. Judson, Corps of Engineers, U. S.

his district there are:

ouses and beacon lights	114
essels in position	4
nals operated by steam, caloric, or oil engines	40
nals operated by clockwork	6
hted buoys in position	15
oys in position	1
uoys in position	108
rs *Dahlia* and *Sumac*, buoy tenders, and for supply and inspection	2
Hyacinth, for construction and repair	1

.—The number preceding the name of a light-station in the Ninth, Tenth. eventh districts, and that portion of the Third district on Whitehall Nar- nd the United States waters of Lakes Champlain and Memphremagog is which it is designated in the List of Lights and Fog-Signals of the States on the Northern Lakes and Rivers, corrected to the opening of ion, 1907.

ing the winter of 1906–7 lights and fog-signals were discon- at all stations on the easterly side of Lake Michigan to the ward of South Manitou light-station, excepting South Fox and Grand Traverse light-stations, and on the westerly side lake at all stations to the northward of Sturgeon Bay Canal station, excepting Seul Choix Pointe light-station, and at all s in Green Bay and Sturgeon Bay. On the easterly side of e all coast lights and fog-signals at stations to the southward l including South Manitou light-station, and on the westerly f the lake to the southward of and including Sturgeon Bay light-station, were maintained throughout the winter. All lights on the lake south of the stations named were exhibited vessels could enter the harbors. Owing to the late receipt of only a part of the annual supplies were delivered to light- s and light-vessels before the close of the fiscal year. Gas were examined and filled at least twice during the year. The *Dahlia* was detached for work in the Eleventh district from t 5 to October 1, 1906.

LIGHT-STATIONS.

464. Old Mackinac Point, Straits of Mackinac, Michigan.—The boilers and engines were transferred from the old fog-signal. A new duplex steam pump was installed. Some 124 running feet of sidewalk was renewed in concrete and laid from the dwelling to the landing crib. Minor repairs were made.

—. *McGulpin Point, Straits of Mackinac, Michigan.*—This light was discontinued on December 15, 1906. The lens was temporarily stored at Old Mackinac Point light-station. The site is to be sold at an early day.

470. White Shoal, Lake Michigan, Michigan.—The act approved on March 4, 1907, appropriated $250,000 for the establishment of a light and fog-signal on White Shoal, north end of Lake Michigan, to take the place of the light-vessel now there. A survey of the shoal is being made to determine the best location for the structure. Plans and specifications will be made soon.

477. Little Traverse, Lake Michigan, Michigan.—The wooden sidewalks were removed and 578 running feet of concrete walk was laid. Minor repairs were made.

478. Petoskey, Lake Michigan, Michigan.—Owing to the extension of the breakwater, the light was on November 9, 1906, moved some 400 feet to the extreme end of the pier. The post and lamphouse destroyed by ice late in last fall were rebuilt.

486. South Manitou, Lake Michigan, Michigan.—A landing crib was built in front of the old landing crib and filled with stone. The boatways were elevated. The exterior door of the lantern gallery of the tower was renewed, as was 28 feet of the sidewalk in front of the boathouse. Minor repairs were made.

488–489. Frankfort Pierhead Range, Lake Michigan, Michigan.—Condemnation proceedings are to be commenced to obtain a site for a light-keeper's dwelling for the use of this light-station.

493. Manistee, Lake Michigan, Michigan.—A sewer with proper connections was laid from the keeper's dwelling to the channel.

505. Muskegon Lake, Lake Michigan, Michigan.—On October 16, 1906, the light was moved from the north to the south side of the channel and established at the elbow on the south pier, near its eastern extremity.

507–508. Grand Haven Pierhead Range, Lake Michigan, Michigan.—On May 10, 1907, the order of the front light was changed from fourth to sixth and the characteristic from fixed white varied by a white flash every minute to fixed red. The color of the rear range light was also changed from fixed red to fixed white, varied by a white flash every minute, and from a lens lantern to the fourth order. The metal tower was moved from its position as a front light to the rear, and placed on a concrete foundation. The fog-signal building was moved to the front and a lantern and lantern gallery were erecte on the gable end for the reception of the sixth-order lens. The dis tance between the lights is 592 feet. A frame oilhouse was erected c the pier. The boathouse was moved back and secured in place; ar the elevated walk was repaired.

509. Holland (Black Lake) Pierhead Range front, Lake Mic gan, Michigan.—On June 28, 1907, the order of this light v changed from the fifth to the fourth, and the distance of visibi

was increased from 9¾ to 13 miles. A fog-signal building is now being erected.

511. Saugatuck Harbor North Entrance, Lake Michigan, Michigan.—The establishment was ordered of a light on a post at the end of the south pier, new entrance to Saugatuck Harbor, and a post and platform were erected, but the light has not yet been exhibited.

515–516. St. Joseph Pierhead Range, Lake Michigan, Michigan.—It is proposed to establish a fourth-order light in a tower surmounting the fog-signal house on the north pier, also a sixth-order light in a small metal tower at the end of the pier, forming a range of 300 feet between the centers of the lights. A contract was made for the erection of the fog-signal house and tower. The materials for this work were obtained and in part delivered at the site.

518. Michigan City East Pierhead, Lake Michigan, Indiana.—About 1,000 feet of metal elevated walk was erected, 400 feet of which was to replace that which was carried away by the storms of the previous winter. A brick oilhouse was also erected. About 175 running feet of revetment was built by contract on the southern boundary of the light-house reservation, facing the river channel. The board of public works at Michigan City, Ind., received permission to occupy and beautify most of the reservation.

Indiana Harbor, southerly end of Lake Michigan, Indiana.—The following is, in part, a copy of a letter dated March 8, 1907, from the Secretary of Commerce and Labor to the House Committee on Interstate and Foreign Commerce:

This Department has the honor to acknowledge the receipt of the committee's letter of January 31, 1907, inclosing for examination and report thereon a copy of H. R. bill No. 35191, "For the establishment [at a cost not to exceed $50,000] of a light-house and fog-signal at the northerly end of the pier at Indiana Harbor, southerly end of Lake Michigan, Indiana."

In reply this Department begs to state that the Light-House Board, to whom the matter was referred, reports that the harbor in question is a private harbor, and that the geographical location of Indiana Harbor is not such as to require the establishment there of a coast light. The Board is of opinion that the only lights that should be established are such pierhead lights or beacons as may prove necessary to enable the owners and maintainers of the piers erected there to utilize them.

The Board is of opinion that such lights ought to be established and maintained, if at all, by the owners of the harbor.

The act approved June 20, 1906, provides, in effect, that after January 1, 1907, private aids to navigation may be established and maintained after obtaining permission from the Light-House Board, in accordance with rules and regulations to be established by the Secretary of Commerce and Labor. This Department has established these rules and regulations, and it suggests that persons interested get permission to erect and maintain such lights at this point as they may desire.

This Department therefore, concurring with the Light-House Board, does not find itself able to recommend the passage of the bill for the establishment of a light-house at Indiana Harbor, in the State of Indiana.

522. Calumet Harbor, Lake Michigan, Illinois.—This fourth-order light was exhibited on July 20, 1906, and the compressed-air siren was established on the same date. A sea wall was built and fastened to the breakwater. A boat crane was erected in the rear of the sea wall.

523. Calumet Pierhead (South Chicago), Lake Michigan, Illinois.—On July 20, 1907, the intensity of the light on the outer end of the north pier was reduced by changing it from a fourth to a sixth order and its characteristic from fixed white to fixed red. On the same

date the 10-inch steam whistle was discontinued and a bell to be struck by machinery once every 20 seconds was established.

529. Chicago Outer Breakwater Northwest End, Lake Michigan, Illinois.—The steel tower formerly used at Racine Reef with Pintsch gas apparatus was erected at this station on four concrete piers.

530. Grossepoint, Lake Michigan, Illinois.—The north fog-signal house was remodeled; the fog-signal plant was installed, and a new chimney was built.

535. Racine Reef, Lake Michigan, Wisconsin.—This Pintsch gas light was discontinued on October 6, 1906, when the new light and fog-signal were put into operation. The characteristic of the light is fixed red, flashing every 5 seconds.

537. Racine Pierhead, Lake Michigan, Wisconsin.—A boathouse was built and various repairs were made.

538. Wind Point (Racine Point), Lake Michigan, Wisconsin.—On December 22, 1906, the characteristic of the fog-signal was changed from blasts of 3 seconds separated by silent intervals of 27 seconds to blasts of 3 seconds separated by silent intervals of 57 seconds. On January 24, 1907, the red light shown from the watchroom of the tower, covering Racine Reef with a red sector, was discontinued. Some 375 square yards of the grounds around the keeper's dwelling were sodded. A boathouse was built and davits were placed on the pier for hoisting the keeper's boat.

540–541. Milwaukee Pierhead Range, Lake Michigan, Wisconsin.—On completion of the concrete superstructure on the north pier a cylindrical metal tower was erected on the outer end of the pier, and a rear range metal tower of 60 feet focal plane, showing a red-lens lantern, was erected 550 feet from the front tower. The fog-signal was provided with a sound deflector. Various repairs were made.

543. Milwaukee Breakwater, Lake Michigan, Wisconsin.—An arrangement was made for a four months' trial of an acetylene light on the end of this breakwater. The trial having proved satisfactory the apparatus was purchased and the light was permanently installed. The old fog-signal building on the breakwater was removed and the materials were stored for future use.

The act approved on June 30, 1906, appropriated "toward the construction of a light and fog-signal station on the south end of the breakwater, harbor of refuge, Milwaukee, Wisconsin, fifty thousand dollars." And the act further provided that "the total cost of said light and fog-signal station, under a contract hereby authorized therefor, shall not exceed one hundred thousand dollars." The act approved on March 4, 1907, further appropriated $50,000, "*Provided*, That this amount and that heretofore appropriated, and the authorization to contract therefor is hereby made available, applicable, and of force for the establishment of said light and fog-signal station on the south end of the proposed extension of the breakwater, harbor of refuge." Plans for this work are in course of preparation.

536. Milwaukee, Lake Michigan, Wisconsin.—This station was discontinued on July 1, 1907, as required by the act approved on February, 26, 1907.

544. Port Washington Pierhead, Lake Michigan, Wisconsin.—The gallery railing of the tower was destroyed by a colliding schooner. The tower was moved out of the way on the pier by the War Depart-

ment for repairs to the superstructure, when it was replaced in its old position after four new sills were provided.

545. Sheboygan Breakwater, Lake Michigan, Wisconsin.—The sea wall was rebuilt. The side of the beacon, which was damaged by storm, was repaired and secured to the sea wall with heavy rods with turnbuckles.

546. Sheboygan Pierhead, Lake Michigan, Wisconsin.—Plans for a dwelling for the light-keepers was prepared, but as there is no site on which to build the dwelling, measures are being taken by condemnation proceedings to acquire a site.

547. Manitowoc Breakwater, Lake Michigan, Wisconsin.—Owing to changes in the breakwater structures, under the War Department, the light and fog-signal structures were moved inshore over some five cribs, which are to be removed in the course of that construction to a point 475 feet distant, which will eventually be the permanent end of the north breakwater pier. A red lantern light was shown by the contractor on the work at the head of the finished structure as it progresses.

549. Two Rivers Pierhead, Lake Michigan, Wisconsin.—The establishment of a fog bell at this point having been decided upon, measures were taken to buy the necessary bell and machinery.

550. Twin River Point, Lake Michigan, Wisconsin.—The light-house reservation was fenced in on the lines of the resurvey made in August, 1905, and various repairs were made.

551–552. Kewaunee Pierhead Range, Lake Michigan, Wisconsin.—The posts of the tower were renewed. A boathouse was built and the boat davits were reerected in front of the new boathouse. A coal chute was built on the roof of the fog-signal house. A new site was purchased for the keepers' dwellings on the southerly side of the channel. After the State has ceded jurisdiction to the site the dwelling will be erected.

562. Cana Island, Lake Michigan, Wisconsin.—The old wooden walks were replaced with 459 running feet of concrete walk. A steel rod was placed through the dwelling between the first floor joists to prevent bulging of the south wall.

563. Porte des Morts (Pilot Island), Lake Michigan, Wisconsin.—The boatways, 87 feet long, on the west side of the island were replaced, and a crib was built. A boat landing was placed at the east landing. Various repairs were made.

564–565. Plum Island Range, Lage Michigan, Wisconsin.—Some 1,149 running feet of fencing, inclosing the buildings, was built. The old wooden walks were removed and 276 running feet were laid in concrete. The old wooden walk, 1,152 running feet long, extending from the front to the rear range, was repaired and 800 feet was renewed.

—. *Fisherman Shoal, Lake Michigan, Wisconsin.*—The following recommendation was made in the Board's annual reports for 1899, 1903, 1904, 1905, and 1906:

> This shoal rock, which is near Rock Island, forms a dangerous obstruction to the increasing number of vessels passing in this vicinity. It is proposed to establish a light and fog-signal on this shoal in the interest of this commerce. It is estimated that it can be done for $50,000, and it is recommended that an appropriation of this amount be made therefor.

The following recommendation, made in the Board's last three annual reports, is renewed:

Because of the great rise in building materials and the cost of working at so exposed a locality, it is recommended that the amount be increased to $75,000.

A lighted buoy is maintained here, but a light and fog-signal are needed to properly mark this dangerous shoal.

Recently the cost of materials and labor have advanced considerably, and it is estimated that $100,000 will now be required to construct a suitable station in view of the exposed location.

—. *Little Gull Island, St. Martin Passage, entrance to Green Bay, Lake Michigan, Michigan.*—The following statement and recommendation, made in the last and many previous annual reports of the Light-House Board, is renewed:

The establishment of a light and fog-signal here, at a cost not to exceed $20,000, was authorized by the act approved February 15, 1893, but no appropriation therefor has yet been made.

The cost of Little Gull Island station under present conditions would be $30,000.

569. Poverty Island, Lake Michigan, Michigan.—A log crib was built and placed between the crib near the shore line and an outer crib and filled with stone as an additional protection to the landing. The inshore end was redecked and a new walk on trestles was built to connect it with the boathouse.

—. *Pointe aux Barques, Manistique, Lake Michigan, Michigan.*—The following appeared in the Board's annual reports for the last nine years, and the recommendation is renewed:

The establishment of the Lake Michigan light and fog-signal vessels, Squaw Island light and fog-signal, Seul Choix Pointe light, and the additional buoyage authorized in the northern part of Lake Michigan has made those waters reasonably safe for navigation on the route from the Straits of Mackinac to Green Bay ports, with the exception of a stretch of 45 miles between Seul Choix Pointe and Poverty Island. Pointe aux Barques is a prominent headland 24½ miles northeast one-half north from Poverty Island light, and 23 miles west-southwest from Seul Choix Pointe light. Poverty Island light is visible 16½ miles, and Seul Choix Pointe is visible 15 miles. There is therefore a space of 13¾ miles off Pointe aux Barques not covered by any light. The town of Manistique, situated at the mouth of Manistique River, at the head of the bay between Seul Choix and Pointe aux Barques, has a large lumber trade, and many vessels call at that port. The route north of the Beavers and along the coast down to Poverty Island Passage into Green Bay is the usual route of the ore vessels to and from Lake Erie ports in northwest winds, and the shipments of ore this year from Escanaba are largely in excess, it is said, of those of any port in the world. The Board recommends that a coast light and fog-signal be established on Pointe aux Barques, Lake Michigan, Michigan. It is estimated that this can be done for a sum not to exceed $32,000, and it is recommended that an appropriation of this amount be made therefor.

The establishment of a coast light and fog-signal here, at a cost not to exceed $32,000, was authorized by the act approved on February 15, 1893, but no appropriation therefor has yet been made.

Owing to recent increase in cost of labor and material, it will now require $45,000 to establish a proper light and fog-signal station in this locality. The light and fog-signal are urgently needed.

571. Seul Choix Pointe, Lake Michigan, Michigan.—An outbuilding was converted into a dwelling for the assistant keeper and various repairs were made.

585. Chambers Island, Green Bay, Wisconsin.—A boat landing was built, also a boathouse, together with boatways 87 feet long.

The fence around the premises, 477 running feet, was renewed. Various repairs were made.

586. Menominee Pierhead, Green Bay, Michigan.—A coal chute was put through the roof of the fog-signal building and a platform was made for convenience in landing coal. The act approved on March 4, 1907, appropriated $1,200 for the purchase of a suitable site for the light-keeper's dwelling, for the erection of which a previous appropriation was made. Plans for that dwelling are now being prepared and a site is being purchased.

591–592. Dunlap Reef Range, Green Bay, Wisconsin.—The characteristics of the front and rear lights were changed from fixed white to fixed red.

595–596. Grassy Island Lower and Upper, Green Bay, Wisconsin.—Materials for repairing the keeper's dwelling and protecting the grounds were obtained, and on May 15, 1907, work was begun. A pile driver and engine were erected and fitted up for the work. All the round piles and sheet piling were driven for protection on two sides, consisting of about 250 running feet.

597. Elbow, Green Bay, Wisconsin.—This structure was carried away by ice last winter and reestablished on the opening of navigation. It consists mainly of a cluster of 12 piles, each 35 feet long. The piles were placed in the form of a square and were wrapped with steel cable. The lantern is shown from a small projecting window on the channel side of a small white house.

Lights on Fox River, Lake Winnebago, and tributary waters, Wisconsin.—The act approved on March 4, 1907, appropriated $500 for post lights on Fox River, Lake Winnebago, and connecting lakes and channels; arrangements are being made to light the most important points as soon as practicable.

OILHOUSES.

An oilhouse was built at Grand Haven pierhead range, Michigan, light-station, and another at Michigan City east pierhead, Indiana, light-station.

LIGHT-VESSELS.

469. White Shoal light-vessel, No. 56, Lake Michigan, Michigan.—This wooden, steam screw, light-vessel was built in 1891, is of about 101 tons burden, has a 6-inch, steam fog-whistle, and a newly installed submarine fog-bell. On December 9, 1906, she went into winter quarters at Sturgeon Bay, Wis. During the winter she was extensively repaired, both in hull and machinery. On April 19, 1907, she resumed her station.

472. Grays Reef light-vessel, No. 57, Lake Michigan, Michigan.—This wooden, steam screw, light-vessel was built in 1891, is of about 101 tons burden, and has a 6-inch, steam fog-whistle, and newly installed submarine fog-bell. On December 9, 1907, she went into winter quarters at Sturgeon Bay, Wis. During the winter she was extensively repaired, both in hull and machinery. On April 19, 1907, she resumed her station.

573. Lansing Shoal light-vessel, No. 55, Lake Michigan, Michigan.—This wooden, steam screw, light-vessel was built in 1891, is of about 101 tons burden, and has a 6-inch, steam fog-whistle, and

newly installed submarine fog-bell. On December 10, 1906, she went into winter quarters at Sturgeon Bay, Wis. During the winter she was extensively repaired, both in hull and machinery. A gasoline motor was furnished for her sailboat. On April 19, 1907, she resumed her station.

576. Eleven-Foot Shoal light-vessel, No. 60, Green Bay, Michigan.—This wooden, light-vessel was built in 1893, is of about 100 tons burden, has a 6-inch, steam fog-whistle, and a newly installed fog-bell. On December 9, 1906, she went into winter quarters at Escanaba, Mich., where minor repairs were made. Her boilers were inspected on April 18, 1907, and she resumed her station.

588. Peshtigo Reef light-vessel, No. 77, Green Bay, Wisconsin.—This steel, light-vessel of about 110 tons burden was built in 190[illegible]. She was towed to Sturgeon Bay on November 25, 1906, where she went into winter quarters. She has a fog-bell rung by hand. On April 20, 1907, she was towed to her station.

—. *North Manitou light-vessel, Lake Michigan, Michigan.*—The Senate Committee on Commerce by letter dated February 1, 190[illegible], asked the Department of Commerce and Labor for its opinion as to the propriety of passing Senate bill No. 8252, providing for the establishment at a cost not to exceed $50,000, of a light-vessel at the easterly end of the southeast shoal near North Manitou Island, in Lake Michigan. The Department replied by letter dated February 8, 1907, in part as follows:

> In reply this Department begs leave to state that the Light-House Board, to whom this matter was referred, recommends the establishment of this aid to navigation. There is a light and fog-signal station on North Manitou Island. In recent years, owing to the deeper loading of the lake steamers, a shoal has developed southeast of North Manitou Island. With the exception of this shoal this is the safest passage through Lake Michigan and is largely used. Owing to the close proximity of Pyramid Point to the eastward it is impracticable for masters to accurately locate the position of their vessels in thick weather and a light-vessel on the easterly end of southeast shoal would aid them in passing through this narrow channel in foggy weather.
>
> It was necessary to refer the matter to the inspector and engineer of the Ninth light-house district for investigation and this caused delay in replying to the committee.
>
> The Light-House Board recommends, and this Department concurs in the recommendation, that this bill do pass.

The Board therefore recommends that an appropriation of $50,000 be made for the establishment of this light-vessel.

—. *Milwaukee light-vessel, Lake Michigan, Michigan.*—The harbor entrance at Milwaukee is in a bight with outlying shoals off each point. The breakwater light is so far in as to be of little value until vessels are off the entrance. A light-vessel to be established about 4 miles out would constitute a mark by which vessels could shape their course when bound either north or south. It is estimated that a suitable vessel could be built for $75,000, and the Board recommends that an appropriation of this amount be made therefor.

82. Relief light-vessel for Ninth and Eleventh light-house districts.—The act approved on March 3, 1903, appropriated $30,000 for a relief light-vessel for use in both the Ninth and Eleventh light-house districts. Plans and specifications were drawn for a suitable vessel and bids several times were invited for her construction. In each case they were in excess of the amount appropriated. The cost of labor and material has increased so much during the years which

have passed since the estimates were made, it is now evident that a proper vessel for this duty can not be obtained for less than $50,000. The Board therefore recommends that $20,000 in addition to the amount appropriated in 1903 be appropriated for this purpose.

FOG-SIGNALS OPERATED BY STEAM OR OTHER ENGINES.

All fog-signals in duplicate, except those on light-vessels. Bituminous coal used unless otherwise specified.

464. Old Mackinac Point, Michigan.—This 10-inch steam whistle was in operation some 471 hours and consumed about 5 tons of anthracite coal and 62 cords of wood.

469. White Shoal light-vessel, No. 56, Michigan.—This 6-inch steam whistle was in operation some 358 hours and consumed about 17 tons of anthracite coal and 2 cords of wood.

472. Grays Reef light-vessel, No. 57, Michigan.—This 6-inch steam whistle was in operation some 351 hours and consumed about 16 tons of anthracite coal and 3 cords of wood.

467. Waugoshance, Michigan.—This 10-inch steam whistle was in operation some 329 hours and consumed about 24 tons of anthracite coal and 38 cords of wood.

474. Skilligallee, Michigan.—This 10-inch steam whistle was in operation some 248 hours and consumed about 32 cords of wood.

476. Beaver Island, Michigan.—This first-class steam siren was in operation some 157 hours and consumed about 27 cords of wood.

480. South Fox Island, Michigan.—This 10-inch steam whistle was in operation some 349 hours and consumed about 66 tons of coal and 33 cords of wood.

482. Grand Traverse, Michigan.—This 10-inch steam whistle was in operation some 210 hours and consumed about 48 cords of wood.

484. North Manitou, Michigan.—This 10-inch steam whistle was in operation some 264 hours and consumed about 35 cords of wood.

485. South Manitou, Michigan.—This 10-inch steam whistle was in operation some 658 hours and consumed about 94 cords of wood.

487. Point Betsie, Michigan.—This 10-inch steam whistle was in operation some 267 hours, and consumed about 45 cords of wood.

488. Frankfort Pierhead Range front, Michigan.—This compressed air siren, operated by a 2½ horsepower oil engine, was in operation some 193 hours and consumed about 71 gallons of oil.

492. Manistee Pierhead, Michigan.—This 10-inch steam whistle was in operation some 379 hours and consumed about 46 tons of coal and 2 cords of wood. The fog-signal and light were moved shoreward on the pier about 50 feet on April 13, 1907.

496. Ludington Pierhead Range front, Michigan.—This 10-inch steam whistle was in operation some 555 hours and consumed about 47 tons of coal and 5 cords of wood.

503. Muskegon Pierhead Range front, Michigan.—This 10-inch steam whistle was in operation some 483 hours and consumed about 53 tons of coal and 2 cords of wood.

507. Grand Haven Pierhead Range front, Michigan.—This first-class compressed-air siren, operated by a 16-horsepower oil engine, was in operation some 341 hours and consumed about 636 gallons of oil.

509. Holland (Black Lake) Pierhead Range front, Michigan.—A 10-inch steam whistle is to be established at this station.

515. St. Joseph Pierhead Range front, Michigan.—This 10-inch steam whistle was in operation some 163 hours and consumed about 36 tons of coal and 3 cords of wood. This signal will be moved about 300 feet shoreward.

518. Michigan City East Pierhead, Indiana.—This 10-inch steam whistle was in operation some 275 hours and consumed about 29 tons of coal and 2 cords of wood.

522. Calumet Harbor, Illinois.—This compressed-air siren, operated by a 16-horsepower oil engine, was established on July 20, 1906, was in operation some 978 hours and consumed about 1,948 gallons of oil.

523. Calumet Pierhead (South Chicago), Illinois.—This 10-inch steam whistle was discontinued and a fog-bell was established on July 20, 1907.

528. Chicago Harbor, Illinois.—This 10-inch steam whistle was in operation some 1,158 hours and consumed about 113 tons of anthracite coal and 11 cords of wood.

530. Grossepoint, Illinois.—This 10-inch steam whistle was in operation some 272 hours and consumed about 32 tons of coal and 1 cord of wood. New boilers were installed.

532. Waukegan Harbor, Illinois.—This compressed-air siren, operated by a 16-horsepower oil engine, was established on July 2, 1906 was in operation some 442 hours and consumed about 804 gallons of oil.

534. Kenosha, Wis.—This compressed-air siren, operated by a 2-horsepower oil engine, was in operation some 305 hours and consumed about 152 gallons of oil.

535. Racine Reef, Wisconsin.—This 10-inch steam whistle was established on October 6, 1906, was in operation some 409 hours and consumed about 58 tons of coal and 3 cords of wood.

538. Wind Point (Racine Point), Wisconsin.—This compressed-air siren, operated by a 13-horsepower oil engine, was in operation some 504 hours and consumed about 1,026 gallons of oil. A change in the characteristic of the signal was made on December 22, 1906.

540. Milwaukee Pierhead Range front, Wisconsin.—This 10-inch steam whistle was in operation some 750 hours and consumed about 63 tons of coal.

546. Sheboygan Pierhead, Wisconsin.—This 10-inch steam whistle was in operation some 344 hours and consumed about 46 tons of coal.

547. Manitowoc Breakwater, Wisconsin.—This 10-inch steam whistle was in operation some 522 hours and consumed about 48 tons of coal and 3 cords of wood. It was moved 475 feet WNW. $\frac{7}{8}$ W. of the breakwater, because of coming changes to be made in the breakwater.

550. Twin River Point, Wisconsin.—This 10-inch steam whistle was in operation some 475 hours and consumed about 43 tons of coal and 4 cords of wood.

552. Kewaunee Pierhead Range rear, Wisconsin.—This 10-inch steam whistle was in operation some 609 hours and consumed about 70 tons of coal and 4 cords of wood.

555. Sturgeon Bay Canal Pierhead, Wisconsin.—This 10-inch steam whistle was in operation some 553 hours and consumed about 74 tons of coal and 5 cords of wood.

563. Porte des Morts (Pilot Island), Wisconsin.—This compressed-air siren, operated by a 16-horsepower oil engine, was in operation some 218 hours and consumed about 521 gallons of oil.

565. Plum Island Range rear, Wisconsin.—This 10-inch steam whistle was in operation some 161 hours and consumed about 34 cords of wood.

568. St. Martin Island, Michigan.—This 10-inch steam whistle was in operation some 187 hours and consumed about 5 tons of coal and 31 cords of wood.

569. Poverty Island, Michigan.—This 10-inch steam whistle was in operation some 202 hours and consumed about 19 tons of coal and 3 cords of wood.

571. Seul Choix Pointe, Michigan.—This 10-inch steam whistle was in operation some 254 hours and consumed about 24 tons of coal and 1 cord of wood.

572. Squaw Island, Michigan.—This 10-inch steam whistle was in operation some 265 hours and consumed about 12 tons of coal and 30 cords of wood.

573. Lansing Shoal light-vessel, No. 55, Michigan.—This 6-inch steam whistle was in operation some 454 hours and consumed about 34 tons of anthracite coal and 2 cords of wood.

576. Eleven-Foot Shoal light-vessel, No. 60, Michigan.—This 6-inch steam whistle was in operation some 213 hours and consumed about 15 tons of anthracite coal and 2 cords of wood.

586. Menominee Pierhead, Michigan.—This 10-inch steam whistle was in operation some 124 hours and consumed about 27 tons of coal and 3 cords of wood.

BUOYAGE.

The buoyage in this district is in good condition.

The gas buoys give satisfaction and the number is not so great but that they can be efficiently attended by the tenders while on their necessary rounds through the district, by transporting gas from the Pintsch plant at Chicago.

LIGHT-HOUSE DEPOTS.

Milwaukee, Wis., light-house depot.—A contract was made for building a storehouse. The structural steel work of the three-story structure was erected as far as the 20 columns of the first story, and the first and second tiers of floor beams; and of the one-story structure all the 14 columns were erected. City water was introduced, and a concrete vault for the water meter was built.

The light-house district machine shop, Milwaukee, Wis.—This shop was in constant use in repairing various articles for illuminating and fog-signal apparatus.

St. Joseph, Mich.—The bulk of all stores, oil, buoys, etc., used in the light-house district are handled here, are packed ready for delivery, and loaded on tenders. Sinkers are made, and general work

on buoy chains, etc., is done here. The gasoline pumping plant now installed gives protection from fire.

Charlevoix, Mich.—This depot is utilized for the storage and overhauling of buoys for the northern end of the lake.

LIGHT-HOUSE TENDERS.

Sumac.—This steel twin-screw steamer was built in 1903, and is of about 700 tons displacement. She is used as an inspection and supply vessel and as a buoy tender. During the year she visited each light-station at least twice. On December 9, 1906, she towed light-vessels Nos. 55, 56, and 57 from their stations to Sturgeon Bay, Wis., and on April 19, 1907, she replaced them on their stations. Extensive alterations and repairs were made to this vessel at Manitowoc, Wis., between June 19 and August 4, 1906. During the year she steamed about 9,251 miles on a consumption of some 1,356 tons of coal.

Dahlia.—This iron, single-screw steamer was built in 1874 and is of about 427 tons gross burden. She is used as an inspection and supply vessel and as a buoy tender. During the year she steamed about 9,582 miles on a consumption of some 604 tons of coal. She visited all light-stations at least once, was detached for supply and buoy work in the Eleventh district from August 6 to October 1, 1906, and attended to the winter and spring buoyage on the west shore of Lake Michigan and in Green Bay. She towed light-vessel No. 77 from her station to winter quarters at Sturgeon Bay, Wis., and replaced her on station in the spring. She received certain repairs, fitments, and supplies, but she will require to be overhauled and extensively repaired.

Hyacinth.—This steel screw steamer, built in 1903, of 738 tons burden, was fully occupied during the season of navigation in making repairs to various light-stations. She was laid up for the winter from December 15, 1906, to March 27, 1907. During this time a number of additions were made to her outfit and machinery and she was thoroughly repainted. She steamed about 9,287 statute miles and consumed some 936 gross tons of bituminous coal while steaming, and during her winter quarters she consumed about 108 gross tons of bituminous coal. She handled some 3,000 tons of miscellaneous articles and building materials to and from the various light-stations. The steamer is in excellent condition.

TENTH DISTRICT.

This district extends from the mouth of St. Regis River, St. Lawrence River, New York, to the mouth of the River Rouge, Detroit River, Michigan. It embraces all aids to navigation on the United States shores and waters of Lakes Erie and Ontario and the upper part of the St. Lawrence, the Niagara, and the lower part of the Detroit rivers.

Inspector.—Commander Thomas S. Rodgers, U. S. Navy, to September 29, 1906; since then Commander Frank M. Bostwick, U. S. Navy.

Engineer.—Col. Henry M. Adams, Corps of Engineers, U. S. Army.

In this district there are:

Light-houses and beacon lights	83
Light-vessels in position	3
Light-vessels for relief	1
Fog-signals operated by steam or oil engines	12
Fog-signals operated by clockwork	6
Gas-lighted buoys in position	29
Other buoys in position	165
Steamer *Crocus*, buoy tender and for supply and inspection	1
Steam barge *Warrington* for construction and repair	1

LIGHT-STATIONS.

55–56. Cape Vincent Breakwater, St. Lawrence River, New York.—The east beacon was moved 500 feet easterly to the outer end of the recently completed part of the breakwater and placed upon concrete piers. Some 500 feet of ⅞-inch cable life line, supported on 2-inch wrought-iron pipe posts set 10 feet apart, close to and along the south side of the breakwater parapet, were provided at the easterly end of the breakwater. Various repairs were made.

57. Tibbitts Point, Lake Ontario, entrance to St. Lawrence River, New York.—The act approved on June 30, 1906, appropriated $4,000 for a keeper's dwelling here. The dwelling is being built by hired labor. The materials are being furnished by contract.

66–70. Genesee, Charlotte Harbor, Lake Ontario, New York.—A cement walk 5 feet wide by 196 feet long was laid along the front of the light-house lot.

76–79. Strawberry Island Lower Cut and Strawberry Island Upper Cut ranges, Niagara River, New York.—The act approved on June 30, 1906, appropriated $13,000 for four range lights in Strawberry Island Cut, and for the channel leading thereto in Niagara River. Surveys were made for locating the range lines, and beacon and sub-

marine sites in the river were selected for three of the four beacons required; and for the other beacon a site was selected in Riverside Park. Plans for the four beacons were prepared, and, as the only bid received for the construction was in excess of the amount appropriated, they are to be built by hired labor. Most of the materials needed were purchased. Work was begun at the Buffalo light-house depot in getting out the beacon frames and finish, and in making concrete blocks and the crib for the foundation of one of the front beacons. Agreement was made for building the pile foundations of the two beacons of the channel range. The site for the front beacon of the cut range was dredged out and leveled up with stone. The foundation crib was placed, and partly filled with stone ballast. The site for the rear beacon was excavated, the concrete foundation laid, and the beacon sills were anchored.

82. Horseshoe Reef, entrance to Buffalo Harbor, Lake Erie, New York.—A pedestal to support the lens was made. The lens lantern temporarily in use was replaced with a fourth-order lens apparatus. Some 784 tons of large stone was placed about the base of the pier for protection against the force of the seas, and a new fender timber extending the entire length of the south side of the pier was fitted and bolted in place. The act approved on June 30, 1906, appropriated $6,200 for a keeper's dwelling for this light-station. Its site was selected on Government land. Plans for the dwelling were completed. As the bids received were in excess of the appropriation, the work was done by hired labor. The dwelling is nearly completed.

100–101. Conneaut Range, entrance to Conneaut Harbor, Lake Erie, Ohio.—The rear range beacon on the west pier was moved to the outer end of the pier on October 13, 1906. The act approved on June 28, 1902, appropriated $8,400 for building a light-house on the new pierhead for the front light and for raising the existing structure on the old pierhead. The light-house on the new pierhead was completed. On October 31, 1906, the permanent fixed white fifth-order light was established there. A derrick for hoisting the keeper's boat was installed on the pierhead. Various repairs were made.

102–103. Ashtabula Range, entrance to Ashtabula Harbor, Lake Erie, Ohio.—A new 20-horsepower oil engine was installed to replace a defective 13-horsepower oil engine, and the latter was shipped to the general light-house depot. Various repairs were made.

104. Fairport, mouth of Grand River, Lake Erie, Ohio.—Twelve rods of wire fence were put up. Various repairs were made. The act approved on February 15, 1893, authorized the establishment of a fog-signal at Fairport Harbor, Ohio, at a cost not exceeding $4,300, for which no appropriation was made. Since the passage of the act the commerce of the port has greatly increased. A fog-signal would be a convenience to and add to the security of vessels entering the harbor and would also be of value as an aid to passing vessels. A fog bell with supporting framework can be established on the north and east end of the west breakwater at a cost not exceeding $2,500, and the Board recommended that an appropriation of this amount be made therefor.

107–108–109–110. Cleveland, entrance to Cleveland Harbor, Lake Erie, Ohio.—On April 30, 1907, the fixed white sixth-order light on the outer end of the west pier was discontinued and in its place a fourth-order flashing white light was established. At the main

entrance to Cleveland Harbor an east and a west breakwater are under construction. The Board considers that two lights ought to be established on the pierheads at the outer ends when the breakwaters are completed. It is estimated that a suitable light-house for the east breakwater pierhead can be built for $12,000 and for the west breakwater pierhead for $33,000, or a total of $45,000 for both, which includes in each case raising the pierheads to 14 feet above mean lake level; and the Board recommends that an appropriation of this amount be made therefor.

111–112. Lorain Range, entrance to Lorain Harbor, Black River, Lake Erie, Ohio.—Some 50 running feet of iron elevated walk was erected on the west pier, extending shoreward from the south end of the iron elevated walk previously erected. The Board decided in 1900, that upon the completion of the east breakwater at Lorain, Black River, Ohio, that it ought to maintain a temporary fixed white lens-lantern light on its pierhead until the west breakwater is completed; and when this was done to establish the Black River Range front light on the west breakwater pierhead; to establish the Black River Range rear light near the outer end of the west pier and to discontiue the temporary light on the east breakwater pierhead. It is now expected that the west breakwater pierhead will be ready soon to receive the light-house. It is estimated that a suitable structure for a light-house can be built for $7,500; to establish the rear range light near the outer end of the west pier will cost, it is estimated, $3,800, and that to provide a boathouse for the care of the keepers' boats on shore will cost about $1,000, on the site now occupied by the west pier range rear beacon, making a total of $12,300, and the Board recommends that an appropriation of that amount be made therefor.

133–134. Maumee Bay Straight Channel Ranges, Maumee Bay, Lake Erie, Ohio.—The act approved on March 3, 1905, appropriated $6,000 for repairs and improvements to protect the towers of this range. In August, 1906, the work, consisting of a concrete superstructure at the inner beacon, was completed. At the outer or easterly beacon the work, consisting of a rubble mound protected by large stone up to mean lake level with a concrete superstructure, is nearly completed. The entire length of this work is some 158 feet, with a width on top of 40 feet.

138. Monroe, entrance to Raisin River, Lake Erie, Ohio.—A walk leading to the boathouse was laid and various repairs were made.

139. Detroit River, mouth of Detroit River, Lake Erie, Michigan.—A 13-horsepower oil engine and compressor attached was installed in place of the old one. The repaired lens of the light was returned to its position. On the same date, April 27, 1907, the characteristic of the light, temporarily flashing white every 5 seconds, was changed to fixed white for 30 seconds followed by six consecutive white flashes, with intervals of 5 seconds between flashes.

LIGHT-VESSELS.

114. Southeast Shoal, Point au Pelee Passage, Lake Erie, Canada.—This steam light-vessel with steam fog-signal apparatus, is maintained here by contract with the Lake Carriers' Association. She was removed from her station for the winter and was replaced at the open-

ing of navigation. In March, 1907, she was equipped with a submarine fog-signal apparatus.

140. Bar Point Shoal light-vessel, No. 59, mouth of Detroit River, Michigan.—This wooden light-vessel is of 105 gross and 56 net tons burden, and has a steam fog-signal. She was removed from her station for the winter on December 17, 1906, and laid up at the Detroit light-house depot. She was replaced on April 2, 1907. On October 17, 1906, she was somewhat damaged by a barge in tow of a steamer, but she remained on her station. In March, 1907, she was equipped with a submarine fog-signal apparatus.

167. Limekiln Crossing South light-vessel, No. 64, Detroit River, Michigan.—This wooden light-vessel is of 18 gross and 10 net tons burden, and has a bell struck by hand as a fog-signal. She was brought in for the winter on December 17, 1906, and was laid up at the Detroit light-house depot. She was replaced on her station on April 2, 1907. On May 3, 1907, a steamer ran into and damaged her, but she remained on her station.

173. Limekiln Crossing North light-vessel, No. 65.—This wooden light-vessel is of 18 gross and 10 net tons burden, and has a bell struck by hand as a fog-signal. On August 25, 1906, she was so damaged by a barge in tow of a steamer as to make it necessary to remove her to the Detroit light-house depot. She was repaired in March and replaced on her station on April 2, 1907. On May 10, 1907, she was damaged by a steamer, but remained on her station. On June 15, 1907, a steamer dragged her from her station.

Relief light-vessel, No. 63.—This wooden light-vessel is of 18 gross and 10 net tons burden. She is ordinarily kept at the Detroit light-house depot. On August 28, 1906, she was placed on the station of the Limekiln Crossing north light-vessel, No. 65. She was removed for the winter on December 17, 1906, and laid up at the Detroit light-house depot.

FOG-SIGNALS OPERATED BY STEAM OR OTHER ENGINES.

57. Tibbetts Point, St. Lawrence River, near Cape Vincent, N. Y.—This 10-inch steam whistle, in duplicate, was in operation some 109 hours and consumed about 6 tons of coal.

60. Galloo Island, Lake Ontario, New York.—This 10-inch steam whistle, in duplicate, was in operation some 89 hours and consumed about 7 tons of coal.

70. Genesee, Charlotte Harbor, Lake Ontario, New York.—This 10-inch steam whistle was in operation some 98 hours and consumed about 6 tons of coal.

84. Buffalo Breakwater North End, Lake Erie, New York.—This 10-inch whistle was in operation some 359 hours and consumed about 15 tons of coal.

88. Buffalo Breakwater South Entrance, Lake Erie, New York.—This automatic, compressed-air siren, in duplicate, was in operation some 203 hours and consumed about 307 gallons of oil.

93. Presque Isle, Presque Isle Peninsula, Lake Erie, Pennsylvania.—This 10-inch steam whistle was in operation some 68 hours and consumed about 3 tons of coal.

102. Ashtabula Harbor Range front, Lake Erie, Ohio.—This automatic, compressed-air siren, in duplicate, was in operation some 190

hours and consumed about 410 gallons of oil. On May 2, 1907, a 20-horsepower oil engine was installed in place of the 13-horsepower engine.

108. Cleveland West Breakwater East End, Lake Erie, Ohio.—This 10-inch steam whistle, in duplicate, was in operation some 760 hours and consumed about 47 tons of coal.

114. Southeast Shoal light-vessel, Point au Pelee Passage, Lake Erie, Canada.—This is an 8-inch steam whistle and is maintained under contract by the Lake Carriers' Association. In March, 1907, a submarine sound signal was experimentally installed.

131. Toledo Harbor, entrance to Straight Channel, Maumee Bay, Lake Erie, Ohio.—This first-class, automatic, compressed-air siren, in duplicate, was in operation some 173 hours, and consumed about 262 gallons of oil.

139. Detroit River, Lake Erie, Michigan.—This first-class, automatic, compressed-air siren, in duplicate, was in operation some 194 hours and consumed about 308 gallons of oil. On July 28, 1906, the engine was replaced by a 13-horsepower oil engine.

140. Bar Point Shoal light-vessel, No. 59, Lake Erie, Michigan.—This 6-inch steam whistle was in operation some 140 hours and consumed about 5 tons of coal. A submarine signal apparatus was experimentally installed in March, 1907, in this vessel.

BUOYAGE.

The buoyage of this district is in good condition.

LIGHT-HOUSE DEPOTS.

Rock Island, St. Lawrence River, New York.—This depot, consisting of a substantial and commodious wharf and buoy shed, provided with an iron car and tracks extending from the wharf front to the interior of the buoy shed, is used for storing the buoys, sinkers, and other buoy appliances for St. Lawrence River and Lake Ontario, and for storing the spar buoys and other appliances.

Buffalo, Lake Erie, New York.—This depot consists of two corrugated-iron, two-story buildings, joined by an inclosed buoy shed of the same material, and open sheds for buoys. It is located near the Buffalo light-station on the inner breakwater. The whole is inclosed by a substantial iron picket fence. The buildings are fitted for storerooms and shops and the sheds for storing buoys, supplies, and other appliances. Tracks are laid, and cars are used for moving stores to the outer sheds and through the inclosed one. Various repairs were made.

The act approved on April 28, 1904, appropriated $74,000 for continuing the construction of this depot. The work under the contract made on December 15, 1904, for building a pile and timber bulkhead, excavating slip, and filling in storage ground, was completed. Some 143 running feet of sheet-piling bulkhead was built adjoining the inner northwest corner of the new slip to protect the sand filling of the depot premises, and other work was done.

Erie, Presque Isle Pierhead, Lake Erie, Pennsylvania.—This depot, located on the north pier, entrance to Presque Isle Bay, consists of a small buoy shed and the landing privilege afforded by the pier. The

buoys and their appliances, except two gas buoys, are stored here during the winter. The two gas buoys from Erie Harbor are, for lack of room, stored on the wharf during the winter.

Sandusky Bay, Cedar Point, Lake Erie, Ohio.—This depot has a wharf and buoy shed provided with iron railway tracks and a car for handling light-house materials and supplies. The buoys and appurtenances from Sandusky Bay and from about the islands to the northward and westward are stored here.

Maumee Bay, Lake Erie, Ohio.—The gas and other buoys for Maumee Bay and Niagara Reef are stored here during the winter. The buoy shed is at present used as a storehouse for cement and tools by the force working on the crib.

LIGHT-HOUSE TENDERS.

Crocus.—This twin-screw, steel, steam tender was built in 1904 and has a displacement of 626 tons. She was employed in caring for buoys, inspecting light-stations and light-vessels, delivering supplies and fuel to light-stations and vessels, and for signals. She delivered supplies to 83 lights, 3 light-vessels, 12 fog-signals, and kept 29 buoys charged with gas. She went into winter quarters at the Detroit light-house depot, on December 20, 1906, and resumed work on April 25, 1907. During the fiscal year she steamed some 6,646 miles, with an expenditure of about 881 tons of coal. There were 82 tons of coal burned during the winter months while she was laid up, receiving extensive repairs and alterations.

Warrington.—This wooden steam propeller barge was built in 1868 and is of 244 net tons burden. She was in winter quarters from December 20, 1906, to March 31, 1907, inclusive. During the remainder of the year she was employed in transporting and handling materials for construction work and general repairs and improvements at light-stations in the district. She steamed some 5,074 miles and consumed about 513 long tons of coal. She received needed fitments, supplies, and repairs.

ELEVENTH DISTRICT.

This district extends from the mouth of the River Rouge, Detroit River, Michigan, to the westerly end of Lake Superior. It embraces all aids to navigation on the United States shores and waters of Lakes St. Clair, Huron, and Superior, the upper part of the Detroit River, the St. Clair and St. Marys rivers, and that part of the Straits of Mackinac lying to the eastward of a line drawn across the straits just to the eastward of Old Mackinac Point light-station, Michigan.

Inspector.—Commander Charles E. Fox, U. S. Navy, to September 30, 1906; since then Commander James T. Smith, U. S. Navy.

Engineer.—Maj. Charles Keller, Corps of Engineers, U. S. Army.

There are in the district:

Light-houses and beacon lights, including 24 post lights	220
Light-vessels in position	3
Day or unlighted beacons	1
Fog-signals operated by steam	34
Fog-signals operated by clockwork	6
Gas-lighted buoys in position	37
Bell buoys in position	1
Other buoys in position	402
Steamers *Marigold* and *Aspen*, buoy tenders and for supply and inspection	2
Steamer *Amaranth*, for construction and repair	1

LIGHT-STATIONS.

198–199. Windmill Point Range, Detroit River, Michigan.—Two steel towers, with winches and appurtenances complete, to replace the wooden beacons now in service, were built and the metal work was delivered at the Detroit light-house depot. The towers are cylindrical steel shells with conical base, the front beacon being 35 feet and the rear beacon 50 feet high to the focal plane. The locomotive headlights to be installed in the new towers were purchased. The old wooden beacons were repaired.

201–202. Isle aux Peches Range, Lake St. Clair, Michigan.—The two pile clusters of this range were again carried away by the ice during the winter of 1906. They were reestablished and the lights were again exhibited on April 26, 1907. The act approved on June 30, 1906, appropriated $18,000 for two range lights at Isle aux Peches, Lake St. Clair, Michigan. A survey was made of that portion of Lake St. Clair in which the permanent structures for marking this range are to be erected, and their positions were located. Plans and an estimate of cost of these structures, were prepared. The cribs were built by contract at the Detroit light-house depot, using material purchased in the regular way, and early in May they were towed to their sites, where they were secured to piles and were filled and riprapped with 342 cords of stone. The cribs are to remain as now bal-

lasted until the season of 1908, that they may be settled in place before the dwelling on the front crib and the shell tower on the rear one are erected. The illuminating apparatus for the two beacons was provided. The construction of the metal work for the rear beacon was in progress when the fiscal year closed.

216. St. Clair Flats Canal Upper, Lake St. Clair, Michigan.—The station grounds were surfaced with black earth, about 1,500 square yards being deposited and leveled in place on the site.

223. Middle No. 5, St. Clair River, Michigan.—This three-pile cluster was rebuilt and the walk leading to the light was repaired.

234-235-236. Stag Island lights, St. Clair River, Michigan.—Three-pile clusters were built in this river, opposite Stag Island, and placed at the lower end, middle, and upper end of the island. Each cluster is located in the water and consists of three piles placed at the angles of a triangle, with platform and mast from which a white post-lantern light is shown at a height of 12 feet above lake level. A pile walk leads from the shore to each light. The clusters were lighted on November 23, but on November 21, 1906, temporary lights were shown.

258. Thunder Bay Island, Lake Huron, Michigan.—About 1,200 square feet of cement walks were laid, a crib was built at the boat harbor, an old wooden cistern was replaced with a brick one, a water-supply pipe was laid and boxed from the well to the new fog-signal house, about 600 feet of the fog-signal tramway was rebuilt, and minor repairs were made.

264. Presque Isle, Lake Huron, Michigan.—Some 105 concrete slabs were made at the Detroit light-house depot for laying cement walks.

266. Spectacle Reef, Lake Huron, Michigan.—The act approved on March 3, 1903, appropriated $54,100 for reconstructing the foundation of this light and fog-signal station, and the act approved on April 28, 1904, appropriated a further sum of $43,900 for completing the work. This work was commenced in the spring of 1904 and was continued until the end of October of that year, when the work was suspended for the season. It was again resumed in the spring of 1905, the steamer *Miami* again serving as a tender, and was continued until October 13, when operations were suspended, and the work was again discontinued for the season. Work was resumed in the spring of 1906 and was continued until October 13, when operations were again suspended, the reconstruction of the pier being practically completed.

268. Cheboygan, Lake Huron, Michigan.—A boathouse was built and minor repairs were made.

270-271. Cheboygan River Range, Lake Huron, Michigan.—The sidewalk in front of the light-house lot at the rear beacon and the walk inside the grounds were renewed in concrete, and the space between the sidewalk and the fence was filled in to a depth of 20 inches and leveled off and sodded.

279. Detour, Lake Huron, Michigan.—The act approved on March 4, 1907, made available, for purchase of a lens which will show flashes only, the appropriation of $4,000 made by the act approved on March 3, 1905, for the purchase of a lens which would show a fixed light varied by a flash at Detour light-station. The lens was purchased and soon will be in position. A submarine bell will be installed here for experimental purposes.

284. Mud Lake, St. Marys River, Michigan.—The top of the foundation crib and the iron column from which this light is shown were carried away on May 6. A temporary light was established. The repairs were begun about the middle of June.

285–286. Winter Point Range, St. Marys River, Michigan.—On account of its importance and its length of 8¾ miles, this range was reconstructed and improved. A skeleton frame tower, 22½ feet high to the focal plane, surmounted by a square frame lantern, was built for the front beacon of the range, a locomotive headlight was installed, and various repairs were made. On June 30 the new lights were shown.

287–288. Pilot Island Range, St. Marys River, Michigan.—About 420 feet of the stone dike leading from the shore to the front is being built.

318. East Side North Entrance Float, No. 14, Hay Lake Channel, Michigan.—On April 23 the structure from which this light is shown was carried away. On May 1 a temporary lens-lantern light was established on a float.

324–325. Six-Mile Point Range, Hay Lake Channel, Michigan.—The work of reestablishing the lights of this range so as to mark the axis of the present channel at Little Rapids Cut, St. Marys River, was completed in November, and on December 1, 1907, the new towers being erected the lights were installed. The beacons are white, cylindrical, steel towers, and each rests on a platform on piles. The front light, shown at a height of 28 feet above lake level, is located in 8 feet of water, about three-eighths of a mile above Six-Mile Point, and the rear light, shown at a height of 47½ feet above lake level, is located at Six-Mile Point in 2 feet of water, 1,975 feet in rear of the front light.

340–341. St. Marys River Lower Range, Michigan.—A concrete oilhouse of 500 gallons capacity was built. Various repairs were made.

343–344. St. Marys River Upper Range, Michigan.—A concrete oilhouse was built and various repairs were made.

346–347. Head of St. Marys River Range, Michigan.—A small ice house and a storm shed were built and various minor repairs were made.

280–351. St. Marys River Range lights, Michigan.—The act approved on March 3, 1903, appropriated $3,622.50 to obtain title to the various sites upon which range lights were erected. The titles are being acquired by condemnation proceedings. The sites upon which the beacons of the Harwood Point Range and the front beacon of the Farmers Ridges Range are standing were purchased.

—. *St. Marys River lights, old channel, Michigan.*—The following-named beacons heretofore lighting the old channel of the St. Marys River, on the easterly side of Sugar Island, were, on December 18, 1906, permanently discontinued:

Indian Point Range lights.
East Neebish Range lights.
Duck Island Range lights.
Lower Lake George float light.
Middle Lake George light.
Upper Lake George float light.
Church Point light.
Churchville Point light.
Manhattan Shoal light.
Payment Range lights.
Catholic Mission Range lights.
Palmers Point light.
Farmers Ridges Range lights.
Partridge Point and Topsail Island Range lights.
Sault Range lights.

Neebish Island (Hen and Chickens) Range lights were also discontinued on December 18, 1906, but were reestablished on July 21, 1907. It is proposed to retain some of these structures as daymarks.

352. Point Iroquois, Lake Superior, Michigan.—A landing wharf was built and provided with an approach 30 feet long. Various repairs were made.

354. Crisp Point, Lake Superior, Michigan.—A landing crib 12 feet wide and 132 feet long, provided with a bulkhead 20 feet square, was built on the west side of the boathouse, filled with stone, and decked.

358. Grand Island, Lake Superior, Michigan.—Thirty-six concrete slabs were made at the Detroit depot for laying cement walks, and were delivered at the station.

360. Grand Island Harbor, Lake Superior, Michigan.—The act approved on March 4, 1907, appropriated $15,000 for range lights at Grand Island Harbor, Munising, Lake Superior, Michigan. Plans are being made for the structures.

365. Marquette, Lake Superior, Michigan.—A new fourth-order lightning-light lens, flashing red every 5 seconds, is to be installed at this station, in place of the fourth-order fixed white light.

366. Marquette Breakwater, Lake Superior, Michigan.—The construction of a new steel beacon to replace the iron tower at present in service on this breakwater, which work was in progress at the close of last fiscal year, was completed, and the metal work was delivered at the Detroit light-house depot. The new structure is planned to include an electric fog-bell ringing apparatus, which apparatus was purchased.

367. Granite Island, Lake Superior, Michigan.—The construction of a landing derrick was in progress when the year closed.

370. Stannard Rock, Lake Superior, Michigan.—A new fog-signal boiler, to replace a worn-out boiler of the present plant, was purchased. Two landing derricks were built and delivered at the station.

372. Portage River, Lake Superior, Michigan.—A concrete sea wall 9 feet high and 100 feet long was built in front of the tower and dwelling. The station fence was rebuilt in wire, and other repairs were made. A brick oilhouse was built. Some 75 concrete slabs were made at the Detroit light-house depot for laying cement walks.

373. Portage River Pierhead, Lake Superior, Michigan.—The following recommendation, made in the Board's last three annual reports, is renewed:

> The 10,000-blow fog-bell apparatus, which was installed at this station in 1902, is inadequate. A steam fog-whistle ought to be established on the outer end of the breakwater, in a structure built so as to show a pierhead light, which would necessitate the construction of an elevated walk leading to it. It is estimated that this work would cost $22,000, and it is recommended that an appropriation of that amount be made therefor.

387. Princess Point, Portage River, Michigan.—This light-house site was surveyed and the walk leading from the boathouse to the dwelling was rebuilt.

398–399. Rouleau Point Range, Lake Superior, Michigan.—The structures from which the lights of this range are shown were rebuilt and located so as to mark the present axis of the improved channel, about 50 feet to the eastward of the old channel. A new crib was built for the foundation of the front beacon, in about 2 feet of water,

the old lamp and target house was placed thereon, and a trestle walk leading to the shore was built. A new foundation was laid for the rear beacon on the shore and the old post and target moved thereto. The walk from the dwelling to the boathouse was rebuilt.

404. Mendota, Lake Superior, Michigan.—Some 110 concrete slabs were made at the Detroit light-house depot for laying cement walks.

405. Manitou, Lake Superior, Michigan.—Some 80 concrete slabs were made at the Detroit light-house depot for laying cement walks. The material for repairing the boat landing was purchased, also a steel fog-signal water-supply tank.

406. Gull Rock, Lake Superior, Michigan.—The south boat landing was extended by adding a crib, and 64 feet of cement walks were laid.

407. Copper Harbor, Lake Superior, Michigan.—A new boathouse was built, the old boat landing was replaced with a new one built of logs, filled with stone and decked, and various repairs were made.

408–409. Copper Harbor Range, Lake Superior, Michigan.—A bridge was built over Bull Creek, and minor repairs were made.

410. Eagle Harbor, Lake Superior, Michigan.—A frame wood shed was built and 74 concrete slabs were made at the Detroit light-house depot for laying cement walks.

413. Eagle River, Lake Superior, Michigan.—The following recommendation was made in the Board's last seven annual reports:

This is supposed to be a coast light and guide to Eagle River. As a coast light it can not now be regarded as of any importance, being only a lens lantern and located back from the general line of the coast. It is of no use as a guide to the entrance to Eagle River, because the mouth of that river is now entirely blocked up with sand. An old dock which was once in use at this point is now rotten and has not had a pound of freight on it for years. There is no commerce in the locality, and no vessels of any draft, except the light-house tenders with supplies, go near the place. There is a rocky reef about one-half mile offshore, extending for several miles along the coast, which makes it dangerous to approach. For several years past no repairs have been made to this dwelling on account of the probability that the light might be discontinued. As a consequence, it is in a far advanced state of decay. If the station is to be continued, all the woodwork of the roof, doors, windows, outhouses, board walks, and fences should be renewed.

The following statement and recommendation were made in the Board's annual reports for 1894, 1896, 1897, 1898, 1899, 1904, and 1905:

The moving of this light to Sand Hills, at a cost not to exceed $20,000, was authorized by the act approved February 15, 1893, but no appropriation therefor has yet been made. Recommendation is made that the amount named be appropriated.

The following recommendation was made in the Board's annual reports for 1900, 1901, 1904, 1905, and 1906:

It is now estimated that $25,000 will be required for this work, and it is recommended that an appropriation of that amount be made therefor.

The following recommendation, made in the Board's annual reports for 1902, 1903, 1904, 1905, and 1906, is renewed:

Owing to the isolated position of the site, the distance to which materials will have to be carried, and the present high prices of all classes of building material, it is believed that a light-house and fog-signal suitable to the locality can not be constructed for less than $38,000. This includes the cost of the site. It had been hoped that the land could be purchased for a reasonable sum, but the present owners ask a price which the Board considers entirely too high. The engineer is still in correspondence with the owners, and it is hoped that a lower price will be named, but if the land can not be purchased by private sale it is possible that it can be secured by condemnation. Under

the circumstances the Board estimates that the site and the erection of the structures will cost $38,000, and it recommends that an appropriation of this amount be made therefor.

414. Portage Lake Ship Canals East Breakwater, Lake Superior, Michigan.—This lens-lantern light was extinguished from October 10, on account of a break in the supply pipes, and was reestablished on October 20. A temporary light was shown during the interim.

416. Portage Lake Ship Canals, Lake Superior, Michigan.—A boathouse was built; a plank walk and a platform were laid.

417. Portage Lake Ship Canals Pierhead, Lake Superior, Michigan.—New steel smokestacks were provided for the fog-signal boilers.

The following recommendation, made in the Board's last five annual reports, is renewed:

The light and fog-signal now on the end of this pier will have to be removed from their present position and established on the end of the breakwater, because of the improvements being made by the Government at the entrance to the canal. It is estimated that it will cost $55,000 to do this work, and the Board recommends that an appropriation of that amount be made for the removal of the light and fog-signal now at Portage Lake Ship Canals pierhead, and the reestablishment of them on the end of the breakwater when it shall become necessary.

No further repairs are to be made to the pier upon which this light and fog-signal now stand, and the structures should be removed as early as practicable. With the appropriation recommended it is proposed to construct an independent crib at the breakwater entrance and locate the light and signal thereon.

418. Fourteen-Mile Point, Lake Superior, Michigan.—The site was surveyed. New steel smokestacks were provided for the fog-signal boilers.

420. Ontonagon Pierhead, Lake Superior, Michigan.—About 70 feet of elevated walk were renewed.

—. *Gull Island, Apostle Group, westerly end of Lake Superior, Wisconsin.*—The following is in part a copy of a letter dated February 7, 1907, from the Department of Commerce and Labor to the Senate Committee on Commerce:

This Department has the honor to acknowledge the receipt of the committee's letter of February 1, 1907, inclosing for examination and report thereon a copy of Senate bill No. 8251, "For the establishment of a light-house and fog-signal station at the easterly end of Gull Island, Apostle Group, westerly end of Lake Superior, Wisconsin."

In reply this Department has the honor to state that the Light-House Board, to whom this was referred, recommends the establishment of this light-house and fog-signal on Gull Island.

Vessels bound for Ashland from Keweenaw Point are unable to see Michigan Island light until abreast of it, and this difficulty is increased in time of fog, as there is no fog-signal at Michigan Island.

Several vessels have run aground in this vicinity during storms. If there had been a light and fog-signal there, the wrecks might have been prevented.

The Light-House Board reporting also that a light and fog-signal can be built here at a cost not exceeding $85,000, this Department recommends that after being so amended this bill do pass.

The Board is now of opinion that the bill should be so amended as to provide for the establishment of a light-house and fog-signal at or near the easterly end of Gull Island.

423. La Pointe, Lake Superior, Wisconsin.—The light-house reservation was surveyed. The fog-signal water supply and landing crib was leveled, one course of timber was added thereto, and the structure was filled with stone and redecked. Various repairs were made.

424. Chequamegon Point, Lake Superior, Wisconsin.—The site was surveyed.

425. Raspberry Island, Lake Superior, Wisconsin.—The keeper's single dwelling was enlarged and converted into a double dwelling.

426. Devils Island, Lake Superior, Wisconsin.—A rubble sea wall was built, 8 feet high and 78 feet long, extending from the inner end of the main boat harbor pier to the rear face of the boathouse. A landing crib was built on the east side of the boatways, and connected to the boathouse by a platform. A gap near the outer end of the northeasterly breakwater was closed by a stone-filled crib. Various repairs were made.

428–429. Superior Pierhead Range, Lake Superior, Wisconsin.—The act approved on June 30, 1906, appropriated $20,000 for range lights at Superior pierhead, Lake Superior, Wisconsin. This matter is held in abeyance pending the final action of Congress on a new project proposed by the War Department for the improvement of this harbor.

441–442. Duluth Range, Lake Superior, Minnesota.—The act approved on March 4, 1907, appropriated $200 for the purchase of the land adjoining the station, which is needed for the erection of an oilhouse and outbuildings. The title papers to the land are being prepared, and various repairs were made.

430–431–454–455. Superior and St. Louis bays, Wisconsin and Minnesota.—The rear pile cluster of the North Channel East Range light was rebuilt. The Ohio Central Coal Dock light, No. 2, was carried away by a boat and was rebuilt at the expense of the owner of the boat. All of the lights in these bays and the two lights in the St. Louis River were again carried away by the ice during the winter of 1906 and 1907. They were rebuilt and the lights were, on May 4, 1907, reestablished.

456. Two Harbors, Lake Superior, Minnesota.—About 1,400 square feet of cement walks were laid. A new fourth-order lightning light lens, flashed red every 5 seconds, is to be installed in place of the fourth-order fixed white light.

457. Two Harbors Breakwater, Lake Superior, Minnesota.—The combined light and fog-bell tower and an electrically operated fog bell, on the easterly breakwater, was completed on August 4, 1906, and on August 4 the light and fog-signal went into operation. The new tower is 33½ feet high to the focal plane, and is a square, pyramidal, skeleton iron structure, painted white, surmounted by a square watchroom and black octagonal lantern. The fog bell is hung from the front of the tower and strikes a single blow every 10 seconds.

458. Split Rock, Lake Superior, Michigan.—The act approved on March 4, 1907, appropriated $75,000 for a light and fog-signal at or near Split Rock, near Beaver Bay, Lake Superior. The plans for the structures are being made.

461. Rock of Ages, Lake Superior, Michigan.—The act approved on March 3, 1905, appropriated $25,000 for making a survey and examination of the site, detailed plans and estimates, and beginning the work of construction of a light and fog-signal station on Rock of Ages. The act approved on June 30, 1906, appropriated $50,000 toward the construction of a light and fog-signal station on Rock of Ages, Lake Superior, and provided that the total cost under a contract, which was authorized therefor, should not exceed $100,000, in addition to the sum of $25,000 appropriated by the act of March 3, 1905. The act approved on March 4, 1907, appropriated $50,000 for

its completion. Plans showing the general features of a design for the proposed light and fog-signal station, together with a description and detailed estimate of cost of the completed work were prepared, and the building material and the steel work for the casing of the pier and the structural work of the tower, also the tools, plant, etc., were purchased. On May 21 a chartered steam barge left Detroit loaded with building material, tools, plant, and the necessary working party, to build the station by day labor. The tender arrived at Washington Harbor on May 27, when the unloading of the steamer and the repairing of the buildings of the Washington Club, which had been leased as the shore depot for the construction party, was begun, and at the close of the year the preliminary work on shore had been completed, the repairing having been finished on the various structures for the accommodation of the working party and for the storage of building material, an extension made of two 16-foot cribs and one 14-foot crib to the landing wharf, and the tramway and trestle walk built to facilitate the handling of materials, and leading from the grounds to the end of the wharf. At the station site the rock blasting was completed, and the dressing of the rock for the base of the foundation cylinder was in progress.

—. *Rock Harbor, Isle Royale, Lake Superior, Michigan.*—The following recommendation was made in the Board's last five annual reports:

On the east side of Isle Royale, near its northeast end, is a small, well-sheltered, landlocked harbor, with good anchorage. At its entrance the channel lies between projecting rocks that are only about 400 feet apart. The location of this harbor is such, if the entrance were properly marked with beacons and lights, that vessels finding themselves in this vicinity would take advantage of it in bad weather. The light which was established here in 1855 was discontinued in 1859. It was established again in 1874, and was again discontinued in 1879 because of the little commerce then seeking that harbor. It now appears that recently the development of mines and like causes have again turned commerce in this direction, and many vessel men ask the reestablishment of these lights in the interests of lake commerce and navigation. The Board is of the opinion that the placing of a small coast light of the third or fourth order in the vicinity of the site of the abandoned light and the placing of a range on the west shore of Rock Harbor and a red light on the north side of the entrance would be sufficient to guide vessels into this harbor. It is estimated that these lights can be established for $15,000, and the Board recommends that an appropriation of this amount be made therefor.

The amount asked for is not sufficient to do the proposed work. The following is a revised estimate of the cost of constructing the various structures recommended for the lighting of this harbor. It is based upon the present high prices of material and labor, the cost of transportation, and the inacessibility of the site. The material is figured upon as in place.

Site for range lights	$300
Tower for coast light	6,000
Keeper's double dwelling	8,000
Boathouse and landing	800
Barn	500
Structures for range lights	1,500
Light on north side of entrance—Middle Island	500
Fourth-order lens	650
Three lens lanterns	375
Contingencies	2,375
Total	21,000

The Board therefore recommends that an appropriation of $21,000 be made for the establishment of this light-station.

463. Passage Island, Lake Superior, Michigan.—A survey was made of this island, showing the shore line and the locations of the various buildings. A new frame pump and siphon house was built and bolted to the rocks. Various repairs were made.

OILHOUSES FOR LIGHT STATIONS.

Under this appropriation oilhouses have been established during the year at St. Marys River Lower Range, St. Marys River Upper Range, and Portage River, Lake Superior, Michigan.

LIGHT-VESSELS.

211. Grossepoint light-vessel, No. 75, upper end of twenty-foot dregded channel, Lake St. Clair, Michigan.—This vessel, of about 160 gross tons, was built in 1902, of tank steel, and was first placed on her station in August, 1902. She was removed on December 19, 1906, and on April 2, 1907, was replaced for the season of navigation. She received needed fitments, supplies, and repairs.

241. Lake Huron light-vessel, No. 61, head of St. Clair River, Lake Huron, Michigan.—This wooden light-vessel was built in 1893, is of about 107 gross tons burden, fitted with steam fog-signal. She was removed from her station on December 18, 1906, and was replaced on April 9, 1907. She received needed fitments, supplies, and repairs.

267. Poe Reef light-vessel, No. 62, entrance to south channel, Straits of Mackinac, Michigan.—This wooden light-vessel was built in 1893, and is of about 107 gross tons burden. She was removed from her station on November 26, 1906, and replaced on April 19, 1907. She received needed fitments, supplies, and repairs.

276. Martin Reef light-vessel, No. 89, northwestern end of Lake Huron, Michigan.—The act approved on March 4, 1907, appropriated $20,000 for completing the construction, equipping, and outfitting complete for service a light-vessel with a fog-signal for this station. She is now being built by contract, which provides that she shall be finished within a year.

Relief light-vessel, No. 82, for the Ninth and Eleventh light-house districts.—The act approved on March 3, 1903, appropriated $30,000 for this purpose. Bids made at three different times being in excess of the appropriation, an additional appropriation of $20,000 is recommended in another place.

FOG-SIGNALS OPERATED BY STEAM ENGINES.

240. Fort Gratiot, Michigan.—This 8-inch steam whistle was in operation some 90 hours and consumed about 11 tons of coal.

241. Lake Huron light-vessel, No. 61.—This 6-inch steam whistle was in operation some 133 hours and consumed about 13 tons of coal.

243. Sand Beach Harbor of Refuge, Michigan.—This 10-inch steam whistle was in operation some 150 hours and consumed about 15 tons of coal.

248. Port Austin Reef, Michigan.—This 10-inch steam whistle was in operation some 102 hours and consumed about 11 tons of coal.

249. Tawas, Michigan.—This 10-inch steam whistle was in operation some 202 hours and consumed about 17 tons of coal.

258. Thunder Bay Island, Michigan.—This 10-inch steam whistle was in operation some 444 hours and consumed about 25 tons of coal.

261. Middle Island, Michigan.—This 10-inch steam whistle was in operation some 402 hours and consumed about 30 tons of coal.

264. Presque Isle, Michigan.—This 10-inch steam whistle was in operation some 404 hours and consumed about 17 tons of coal.

265. Forty-Mile Point, Michigan.—This 10-inch steam whistle was in operation some 132 hours and consumed about 12 tons of coal.

266. Spectacle Reef, Michigan.—This 10-inch steam whistle was in operation some 192 hours and consumed about 14 tons of coal.

267. Poe Reef light-vessel, No. 62, Michigan.—This 6-inch steam whistle was in operation some 184 hours and consumed about 10 tons of coal.

268. Cheboygan, Michigan.—This 10-inch steam whistle was in operation some 250 hours and consumed about 15 tons of coal.

273. Round Island, Michigan.—This 10-inch steam whistle was in operation some 249 hours and consumed about 13 tons of coal.

279. Detour, Michigan.—This 10-inch steam whistle was in operation some 476 hours and consumed about 25 tons of coal.

352. Point Iroquois, Michigan.—This 10-inch steam whistle was in operation some 529 hours and consumed about 32 tons of coal.

353. Whitefish Point, Michigan.—This 10-inch steam whistle was in operation some 694 hours and consumed about 43 tons of coal.

354. Crisp Point, Michigan.—This 10-inch steam whistle was in operation some 383 hours and consumed about 24 tons of coal.

357. Big Sable, Michigan.—This 10-inch steam whistle was in operation some 525 hours and consumed about 30 tons of coal.

365. Marquette, Michigan.—This 10-inch steam whistle was in operation some 251 hours and consumed about 20 tons of coal.

368. Big Bay Point, Michigan.—This 10-inch steam whistle was in operation some 229 hours and consumed about 18 tons of coal.

369. Huron Island, Michigan.—This 10-inch steam whistle was in operation some 168 hours and consumed about 15 tons of coal.

370. Stannard Rock, Michigan.—This 10-inch steam whistle was in operation some 437 hours and consumed about 15 tons of coal.

405. Manitou, Michigan.—This 10-inch steam whistle was in operation some 627 hours and consumed about 40 tons of coal.

410. Eagle Harbor, Michigan.—This 10-inch steam whistle was in operation some 544 hours and consumed about 43 tons of coal.

417. Portage Lake Ship Canals pierhead, Michigan.—This 10-inch steam whistle was in operation some 613 hours and consumed about 46 tons of coal.

418. Fourteen-Mile Point, Michigan.—This 10-inch steam whistle was in operation some 251 hours and consumed about 15 tons of coal.

421. Outer Island, Wisconsin.—This 10-inch steam whistle was in operation some 393 hours and consumed about 20 tons of coal.

423. La Pointe, Wisconsin.—This 10-inch steam whistle was in operation some 322 hours and consumed about 23 tons of coal.

425. Raspberry Island, Wisconsin.—This 10-inch steam whistle was in operation some 215 hours and consumed about 20 tons of coal.

426. Devils Island, Wisconsin.—This 10-inch steam whistle was in operation some 331 hours and consumed about 24 tons of coal.

428. Superior Pierhead Range front, Wisconsin.—This 6-inch steam whistle was in operation some 484 hours and consumed about 36 tons of coal.

441. Duluth Range front, Minnesota.—This 10-inch steam whistle was in operation some 547 hours and consumed about 39 tons of coal.

456. Two Harbors, Minnesota.—This 10-inch steam whistle was in operation some 632 hours and consumed about 55 tons of coal.

463. Passage Island, Michigan.—This 10-inch steam whistle was in operation some 902 hours and consumed about 50 tons of coal.

BUOYAGE.

The buoyage of this district is in fair condition.

LIGHT-HOUSE DEPOTS.

Detroit, Mich.—This is the principal depot for this district, and is used for receiving and storing buoys, stores, and supplies, and in making buoys and concrete sinkers. The light-house tenders here receive their cargoes of supplies and stores and material for the construction of new and the repair of existing light and fog signal stations, while the two basins serve as winter quarters for the tenders and light-vessels of this district, and have also been used for those of the Tenth district. A fire hydrant, with hose and reel, was established in the center of the yard, and various repairs were made.

Sugar Island, St. Marys River, Michigan.—This depot is used for the reception and storage of buoys used in marking the channel in St. Marys River and Hay Lake. Various repairs were made.

Minnesota Point, Minnesota.—The act approved on March 3, 1903, appropriated $14,000 for establishing a light-house depot on the light-house reservation at Minnesota Point, Minnesota. The wharf was completed. It is 196 feet long and 20 feet wide. The material for a combined buoy shed and oil house was purchased and work on the building is now in progress.

LIGHT-HOUSE TENDERS.

Marigold.—This iron screw steamer was built in 1890, and is of 587.43 tons burden. She was employed in caring for buoys, inspecting light-houses, and delivering supplies and fuel to light-stations and fog-signals. She steamed some 13,760 miles and consumed about 992 tons of bituminous coal, delivering supplies to 220 lights, 34 steam fog-signals, and keeping charged with gas 37 buoys. She received needed fitments, supplies, and repairs.

Aspen.—This steel screw steamer was built in 1906, and is of 276.65 gross tonnage. During the year she was employed in caring for buoys in St. Marys River, and in addition, rendered other services when necessary. She steamed some 8,319 miles and consumed about 534 tons of coal. She received needed fitments, supplies, and repairs.

Anemone.—This vessel, now being built by contract for use on Lake Superior, is a steel steamer of 900 tons displacement. She measures 190 feet over all, with 173 feet 4 inches load water line; has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion inverted, direct-acting

engines driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch by two Scotch boilers, 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys, which are now being practically tested by the Board. This vessel is to be ready within the year.

Amaranth.—This steel screw steamer was built in 1892, and is of 744 tons burden. She visited most of the light-stations in the district, delivering to each more or less material for construction and repair. She was also employed in conveying working parties with building material to Sturgeon Point, Detour, and St. Marys River Lower Range light stations, in placing and ballasting the foundation cribs for the permanent lights of the Isle aux Peches Range, in locating the positions of the Stag Island lights, in delivering stone, sand, and gravel at Portage River, Huron Island, Spectacle Reef, Detour, Crisp Point, and the Detroit depot, and in delivering the material for the construction of the combined buoy shed and oil house for the Minnesota Point depot. In performing these duties she delivered 3,334 tons of miscellaneous material, steamed 10,656 miles, and consumed 999 gross tons of coal. She was in winter quarters from January 1 to March 22, 1907, during which time 90 gross tons of coal were consumed in keeping up steam for heating purposes and for fire protection for the tenders and depot. She received needed fitments, supplies, and repairs.

Clover.—The hull of this launch was rebuilt, a new boiler was provided, and the engine was overhauled and refitted.

Lotus.—This launch was equipped with a new fore and aft compound engine, the boiler was reset, and the boiler and the hull were painted.

TWELFTH DISTRICT.

This district extends from the boundary between California and Mexico to the boundary between California and Oregon. It embraces all aids to navigation on the seacoast, bays, rivers, and other tidal waters of California. Since January 1, 1904, it has included the light-house service of Hawaii, under the Executive order dated December 28, 1903; the light-house service of the Midway Islands, under the Executive order dated December 9, 1904; the light-house service of the island of Guam, under Executive order dated May 13, 1905, and the light-house service of the American Samoan Islands, under the Executive order dated July 3, 1905.

Inspector.—Commander Henry T. Mayo, U. S. Navy, to June 30, 1907; since then Commander Robert R. Lopez, U. S. Navy.

Engineer.—Maj. Charles H. McKinstry, Corps of Engineers, U. S. Army.

There are in this district:

Light-houses and beacon lights, including 4 post lights and 30 light-houses in Hawaii	92
Light-vessels in position	2
Light-vessels for relief	1
Day or unlighted beacons	46
Fog-signals operated by steam or oil engines	21
Fog-signals operated by clockwork	13
Gas-lighted buoys in position	3
Whistling buoys in position	18
Bell buoys in position	9
Other buoys in position	77
Steamer *Madrono*, buoy tender and for supply and inspection	1
Yerba Buena launch	1
Armeria for supply and inspection on the Pacific coast	1

NOTE.—The number preceding the name of a light-station in the Twelfth district is that by which it is designated in the List of Lights and Fog-Signals on the Pacific Coast of the United States, corrected to August 1, 1907.

LIGHT-STATIONS.

1. Point Loma, entrance to San Diego Bay, California.—An intercommunicating telephone system connecting the tower and quarters was installed. Trees to provide a wind-break and fence were planted along the boundary line of the station. The pipe line connecting the station water system with that of Fort Rosecrans was completed. Minor repairs were made.

2. Ballast Point, San Diego Bay, California.—A concrete oilhouse and a small frame storehouse for miscellaneous supplies were built. A pipe line connecting the station with the water mains of Fort Rosecrans was completed.

4 to 8. San Diego Bay lighted beacons, California.—A concrete oil-house was built.

—. *Santa Barbara channel islands, California.*—Three islands of this group, San Clemente, Anacapa, and San Nicolas, are reserved for light-house purposes. San Clemente was leased for a period of five years from January 1, 1906, at $1,000 per annum. Anacapa was leased to the highest bidder for five years from April 1, 1907, at $31 a year. San Nicolas was leased to the highest bidder for five years commencing on April 15, 1907, at $362.50 a year.

—. *San Pedro Breakwater, entrance to outer harbor, San Pedro, Cal.*—A light and fog-signal on the outer end of the breakwater will be useful to coasters as well as to commerce to and from the present harbor of Wilmington and which will spring up under the lee of the breakwater. It is expected that the concrete block forming the outer end of the breakwater will be finished in about one year, and it is recommended that the block be subjected to the storms of one year before the superstructure be commenced. The Board estimates that the proposed light and fog-signal, including quarters, can be built for $36,000, and it recommends that an appropriation of this amount be made therefor.

12. Point Hueneme, entrance to Santa Barbara Channel, seacoast of California.—The boundary line was surveyed and permanently marked. Minor repairs were made.

14. Point Conception, entrance to Santa Barbara channel, California.—An oilhouse was completed. It is connected with the light tower by a concrete walk 3½ feet wide, 140 feet long. Measures were taken for installing by contract a fuel-oil burning system for the fog-signal. The plant includes a sump tank near the wagon road, connected by a 2-inch diameter gravity pipe line 650 feet long to a 10,000-gallon redwood storage tank 60 feet from the signal building. The oil is delivered by gravity to two special oil force pumps and is forced through the nozzles at the proper pressure under the signal boilers. The pumps and discharge-pipe lines are in duplicate and are interchangeable, each pump delivering to either boiler. On April 22, 1907, the installation was completed. The contract price was $2,660. A concrete retaining wall supporting an area around the quarters is being built, of which 200 running feet of wall 5 to 11 feet high was completed.

15. Point Arguello, about 12 miles northwest of Point Conception, seacoast of California.—The construction of a 40,000-gallon concrete cistern was completed. The cistern is 24 feet internal diameter, with wall 1 foot thick. The lower portion of the walls are in excavation and the upper portion reenforced with ¾-inch diameter rods. The top and floor are reenforced with expanded metal. A rectangular sheet-steel oil tank of 1,800 gallons capacity was installed for supplying the oil engines operating the air-compressor plant for a fog-signal.

—. *Point Sal, seacoast of California.*—A survey was made of 20 acres of this reservation best suited for the needs of a light-station. Some 22.2 acres and Lion Rock were selected and marked on the ground.

16. San Luis Obispo, seacoast of California.—A fuel-oil burning system was installed in the fog-signal. The fuel oil is received at the light-house wharf, where it can be pumped either from a sump

well or from a barge alongside. The steam special oil pump is operated by the boiler for the wharf-derrick engine. It delivers the oil through 1,600 feet of 4-inch diameter pipe to two 10,000-gallon wooden storage tanks near the signal building. From the tanks the oil is delivered by a 3-inch pipe to the force pumps connected with the burners. From the suction pipe the system is in duplicate and is interchangeable. The plant was installed by hired labor. A pipe line to supply the wharf boiler with creek water was laid.

17. Piedras Blancas, 5 miles northward of San Simeon Point, seacoast of California.—An intercommunicating telephone system connecting the tower, fog-signal, and keepers' quarters was installed. Various repairs were made.

The following is an extract from the Board's last two annual reports, and it is recommended that steps be taken to secure the appropriation therein mentioned for the purpose stated:

The following is a copy of a letter, dated December 10, 1904, from the Secretary of Commerce and Labor to the Secretary of the Treasury:

"It is necessary to the safety of the light-station at Piedras Blancas, California, especially to the safety of the large quantity of mineral oil which it is necessary to keep at that important and isolated high-class light-station, that more secure and less dangerous storage facilities for the oil be provided. Large quantities of mineral oil are now stored in an oil room attached to the light tower, in which is a light which was originally designed to burn lard oil. This method of storage of mineral oil is considered to be dangerous. It is therefore recommended that an isolated brick oilhouse be built, in which this inflammable illuminant can be kept. A building of the size needed to store the large quantity of oil needed for this first-order light can not be built for $550, the sum named as the maximum for such buildings in the general appropriation for building oilhouses.

"It is estimated that an oilhouse suitable for this station can be built for $1,500, and the Light-House Board recommends, and in that recommendation this Department concurs, that an appropriation of this amount be made therefor."

19. Point Pinos, entrance to Monterey Bay, California.—At the beginning of the fiscal year the repair of extensive damage resulting from the earthquake of April 18, 1906, to this station was commenced, and has been completed. The lantern and lens were removed from the top of the tower, and the tower walls removed for about 5 feet below the lantern floor. The original walls were of brick masonry 1 foot thick. The tower was rebuilt of reenforced concrete of the same thickness and general design. The reenforcing metal, consisting of ¾-inch diameter rods laid vertically 8 inches apart, was set in holes drilled into the remaining walls; horizontal rings of ⅝-inch diameter wire cable were used to fasten the vertical rods. The station is supplied with water from the mains of the town of Pacific Grove. Minor repairs were made. A new 2-inch pipe, 2,200 feet long, was laid and connected with an elevated 4,000-gallon redwood tank. The tank is on the framed support and affords an efficient fire protection for the station. Minor repairs were made.

20. Santa Cruz, northern entrance to Monterey Bay, California.—A concrete oilhouse was built. Various repairs were made.

21. Año Nuevo Island, seacoast of California.—A 15,000-gallon redwood water tank was erected on a redwood frame supported by concrete piers. Various repairs were made.

23. Pigeon Point, seacoast of California.—An intercommunicating telephone system of 6 phones was installed. The 10-foot aeromotor windmill destroyed by storm was replaced.

The following is a copy of a letter, dated December 24, 1904, from the Secretary of Commerce and Labor to the Senate Committee on Commerce:

This Department has the honor to acknowledge the receipt of a letter, dated December 17, 1904, from your committee, inclosing a copy of Senate bill No. 6178, "To purchase an additional strip of land to the eastward of the light-house at Pigeon Point, California," on which suggestions are asked touching the merits of the bill and the propriety of its passage.

In reply this Department begs leave to state that the Light-House Board, to whom the matter was referred, reports that in several of its recent annual reports it recommended that an appropriation of $5,000 be made for this purpose, and that it is still of opinion that this appropriation should be made. It is also recommended on page 255 of the Book of Estimates for 1906.

The following is an extract from pages 155–156 of the Board's annual report for 1904:

"The following recommendation, made in the Board's annual reports for ten years, up to and including that for 1903, is again made:

"'There are standing, outside of the light-house site, but close to the fence inclosing the light-house structures, a fisherman's shanty and a hay barn. If a fire should break out in either of these buildings it would endanger the structures of the light-station. It is proposed, in order to obviate this danger, that an additional strip of land to the eastward of the station, say 150 feet wide, be purchased and added to the light-house reservation. This, it is estimated, can be done for not exceeding $5,000, and it is recommended that an appropriation of this amount be made therefor.'

"This Department concurs in the recommendation of the Light-House Board in this case."

An oilhouse is needed here, for the same reasons as are given in the letter dated December 10, 1904, from the Secretary of Commerce and Labor to the Secretary of the Treasury, relative to the need of an oilhouse at Piedras Blancas, California, printed on another page in this chapter. It is estimated that it can be built for $1,500, and the Board recommends that an appropriation of that amount be made therefor.

23. Point Montara, seacoast of California.—A 15,000-gallon redwood water tank was installed. Various repairs were made.

24. Farallon, on southeast Farallon Islet, off the entrance to San Francisco Bay, California.—A fuel-oil burning system for the fog-signal was installed. The plant consists of a 450-gallon redwood sump tank on the north receiving wharf. From the sump tank the oil is lifted to two 10,000-gallon redwood storage tanks through 1,600 feet of 4-inch diameter pipe by a special duplex steam pump. Steam is taken from the hoisting-engine boiler on the wharf. From the storage tank the oil is carried to the 2-inch diameter pump suctions by a 3-inch diameter pipe. From the 3-inch pipe the system is in duplicate and interchangeable. An oilhouse was built. A stiff-leg derrick with a 12-inch diameter mast and a 12-inch diameter boom 66 feet long was placed on the southeast landing. Various repairs were made.

26. Bonita Point, entrance to San Francisco Bay, California.—The work of razing the wrecked double quarters for the assistant keepers was completed. A new windmill replacing one wrecked during a windstorm was erected on a steel tower. A 4-inch galvanized pipe line 250 feet long was laid from the wharf to the fuel-oil storage tank at the top of the hill and connected to the 2-inch line leading to the tanks near the signal. Various repairs were made.

The following is a copy in part of a letter dated February 6, 1907, from the Department of Commerce and Labor to the Treasury Department:

The act approved on June 30, 1906, appropriated $6,000 for rebuilding a double dwelling for assistant light-keepers at the Bonita Point, California, light-station.

On account of the rise in the price of labor and materials on the Pacific coast, amounting in the case of some materials to as much as 100 per cent and in the case of labor to 25 to 35 per cent, it is impossible to build a suitable dwelling for $6,000.

The Light-House Board therefore recommends, and this Department concurs in the recommendation, that an additional appropriation of $2,000 be made to complete the dwelling in question.

27. Mile Rocks, entrance to Golden Gate, San Francisco Bay, California.—Two derricks for receiving supplies on the east and west sides of the station were installed. A covered boat hoist was erected on the Presidio wharf for caring for the keepers' boat when they are ashore. The storage for oil for operating the oil engines was replaced with ten 144-gallon range boilers. Various repairs were made.

29. Lime Point, San Francisco Bay, California.—A new 30,000-gallon redwood water tank supported by 10 concrete piers was added to the water supply of the station. A small frame storehouse was built. A wooden bridge on the road to the station, which had been wrecked by a severe storm, was removed. A 9,000-gallon redwood tank was added to the fuel-oil storage and a 4-inch galvanized pipe line 900 feet long laid to the engineer's wharf for receiving fuel oil from barges.

32. Alcatraz Fog-Signal Station, northwesterly end of Alcatraz Island, San Francisco Bay, California.—A new No. 3 Gamewell fog-bell striking apparatus and an electric system controlling both this and the bell on the south fog bell from the keeper's dwelling was installed.

34. Yerba Buena Island, on the southerly end of Goat Island, San Francisco Bay, California.—A concrete oilhouse was built. A stiff-leg derrick is being erected at the landing and will be provided with a double-cylinder hoisting engine. A three-phone intercommunicating telephone system, replacing the call-bell system, was installed. Various repairs were made.

36. Oakland Harbor, South Jetty, 240 feet west from the westerly end of South Jetty entrance to Oakland Harbor, San Francisco Bay, California.—On June 15 this 4-pile lighted beacon, with a protecting 3-pile dolphin, was wrecked by a colliding steamer. It will be replaced soon.

41. East Brother Island, San Pablo Bay, California.—The frame fog-signal building was enlarged and a fog-bell striking apparatus furnished. A concrete oilhouse was built. A cement walk to the signal building was laid. Various repairs were made. A steamer ran into the wharf, completely wrecking the piles and damaging the boathouse. The wharf will be rebuilt soon.

42. Mare Island, entrance to Carquinez Strait, San Pablo Bay, California.—Repairs to the lens at this station were made. A fog-bell striking apparatus was installed, replacing an old one.

44. Carquinez Strait, between San Pablo and Suisun Bay, California.—The act approved on March 4, 1907, appropriated $50,000 for establishing a light and fog-signal at Carquinez Strait station. Plans were made and the work will be commenced soon.

—. *Army Point, Suisun Bay, California.*—A light and fog-signal at this point would prove a valuable aid to navigation. It is estimated that such a station can be established for not exceeding $10,000, and the Board recommends that an appropriation of that amount be made therefor.

56. Point Reyes, Pacific Ocean, California.—A 40,000-gallon redwood water tank was built. A sand shed and wind-break 164 feet long was rebuilt. A shed roof covering was erected over the fuel-oil storage tanks.

The following is a copy of a letter dated December 10, 1904, from the Secretary of Commerce and Labor to the Secretary of the Treasury:

It is necessary for the safety of the light-station at Point Reyes, California, and especially to the safety of the large quantity of mineral oil which it is necessary to keep at that important and isolated high-class light-station, that more secure and less dangerous storage facilities for it be provided. This mineral oil is now stored in an oil room, attached to the light tower, in which it was originally designed to store lard oil. This is dangerous not only to the mineral oil but to the light tower. Therefore it is recommended that an isolated brick oilhouse be built in which this inflammable illuminant can be stored. A building of the size in which to keep safely the large quantity of oil needed for this first-order light can not be built for $550, the sum named as the maximum for building oilhouses in the general appropriation for oilhouses.

It is estimated that an oilhouse suitable for this station can be built for $1,500, and the Light-House Board recommends, and in that recommendation this Department concurs, that an appropriation of this amount be made therefor.

57. Point Arena, seacoast of California.—The rebuilding of this station progressed during the year. The lantern was removed from the wrecked masonry tower and set up on a frame temporary tower a short distance from the original site. A second-order lens was installed and has been exhibited since January 5, 1907. The temporary frame tower contains a suitable watchroom 12 feet square. The wrecked first-order lens was packed and shipped to the general light-house depot. The brick masonry of the old tower was torn down and that portion of the material suitable for use cleaned and stored. The masonry tower is to be replaced with one of concrete-steel construction. The detailed drawings are nearly done. The materials for the work are being assembled. The brick quarters for four keepers have been razed and the material suitable for future use cleaned and stored. The plans were made for four keepers' dwellings. Various repairs were made.

58. Point Cabrillo, about 4 miles north of Mendocino city, seacoast of California.—The act approved on June 30, 1906, authorized a contract for the construction of a light and fog-signal, at a cost not to exceed $50,000, and appropriated $25,000 therefor. The site for the light-station was selected, surveyed, and measures are being taken to obtain title to this site.

—. *Punta Gorda, just south of Four-Mile Creek near Punta Gorda, seacoast of California.*—The recommendation made in the Board's last five annual reports that an appropriation of $60,000 be made to establish a light and fog-signal at or near Punta Gorda, California, is renewed.

59. Cape Mendocino, seacoast of California.—The act approved on June 30, 1906, appropriated $5,400 for the rebuilding of the keeper's dwelling here. Plans were approved and the work was commenced.

61. Humboldt, on Table Bluff, about 4 miles southerly of the entrance to Humboldt Bay, California.—A concrete oilhouse was built.

62. Humboldt fog-signal, southern end North Spit, entrance to Humboldt Bay, California.—The act approved on June 30, 1906, appropriated $15,000 for establishing a fog-signal at the entrance to Humboldt Bay. Plans for a wharf were prepared and bids were invited for its erection.

63–69. Humboldt Bay, lighted beacons, California.—Indian Island Spit beacon, a four-pile structure, was wrecked during a severe storm and was rebuilt. A wharf 60 feet by 10 feet for use of the keeper in lighting the beacons, was built on the south side of the entrance to the harbor. A concrete oilhouse was built on the North Spit light-house reservation. Various repairs were made.

70. Trinidad Head, seacoast of California.—A concrete oilhouse was built. About 215 running feet of wooden walks about the station were replaced with concrete walks. Various repairs were made.

71. Crescent City, seacoast of California.—On May 18, 1907, the lens was replaced with a new four-panel fourth-order lens, and the characteristic was changed from flashing white every 90 seconds, to flashing white every 15 seconds. Various repairs were made.

OILHOUSES.

The following is a list of oilhouses built during the year:

Ballast Point light-station, California.
San Diego Bay lighted beacons, California (built at Ballast Point).
Point Conception light-station, California.
Santa Cruz light-station, California.
Farallon light-station, California.
Yerba Buena light-station, California.
East Brother Island light-station, California.
Humboldt light-station, California.
Humboldt Bay lighted beacons, California (built on North Spit).
Trinidad Head light-station, California.

DAY OR UNLIGHTED BEACONS.

Anita Rock, San Francisco Harbor, California.—This day-mark, an iron column surmounted with a round cage, was destroyed. Owing to expensive cost of reconstruction, it has been replaced by a third-class nun buoy.

Alviso Channel, No. 10, lower part of San Francisco Bay, California.—This three-pile beacon, crossed by slats, was destroyed October 26, 1906, and was rebuilt, on creosoted piles, January 23, 1907.

Commission Rock, Mare Island Strait, San Pablo Bay, California.—This daymark, an iron column surmounted by a round cage having vertical slats, was destroyed and rebuilt.

Bonita Point unused light-house, entrance to San Francisco Bay, California.—The light having been discontinued, this conical tower, 36 feet high, is used as a daymark only. It was all but destroyed by the earthquake.

Anita Rock, San Francisco Bay, California.—Destroyed on August 13, 1906. It has been replaced by a buoy.

San Pablo Bay dredged channel, Nos. 1, 3, 5, 7, 9, 11, 13, and 15, San Pablo Bay, California.—These beacons were established in March, 1906. Beacons Nos. 1, 3, 5, 7, and 15 were destroyed and replaced by first-class can buoys.

Commission Rock, San Pablo Bay, California.—This iron cylindrical beacon, surmounted by a spindle, was destroyed on July 31, 1906, and was rebuilt on November 19, 1906.

San Joaquin Middle Ground Lower End, No. 10, Suisun Bay, California.—This three-pile beacon, crowned with a box, was destroyed on July 15, 1906, and was, on January 29, 1907, rebuilt.

Humboldt unused light-house, Humboldt Bay, California.—This conical unused light-tower, 45 feet high, on the dwelling, is used as a daymark only.

LIGHT-VESSELS.

San Francisco light-vessel, No. 70, off San Francisco Bar, California.—This self-propelling, steam, steel light-vessel was built in 1897–98, and is of about 590 tons displacement. She shows two fixed white electric lights with eclipses. Her fog-signal is a 12-inch steam chime whistle. During the past year she consumed about 42 tons of coal to operate the fog-signal alone, about 266 tons for the electric lights, and 234 tons additional for all other purposes, making a total consumption of some 532 tons. On January 2, 1907, this vessel was brought in and was repaired. The station was marked by the relief light-vessel. On February 11, 1907, she was returned to her station.

Blunts Reef light-vessel, No. 83, off Cape Mendocino, California.—This steel, steam, self-propelling light-vessel, of about 621 tons displacement, was built at Camden, N. J., in 1904. She shows a cluster of three oil lights from both fore and main masts. Her fog-signal is a 12-inch steam whistle. During the past year she consumed about 60 tons of coal to operate the fog-signal alone, about 51 tons for operating the main engine, and some 288 tons additional for all other purposes, making a total consumption of about 399 tons. She was dragged out of position six times during the heavy storms of the past year; first time on November 3, and was replaced November 7, 1906; again on December 9, and was replaced December 11, 1906; again on January 6, and was replaced January 8, 1907; again February 24, and was replaced February 27, 1907; again on March 22, and was replaced on March 25, 1907; and again on June 19, and was replaced June 28, 1907. On March 20, 1907, this vessel was brought in for repairs and the station marked by the relief light-vessel. On April 25, 1907, she resumed her station.

Relief light-vessel, No. 76.—This first-class, steel, steam, self-propelling light-vessel, with a displacement of about 578 tons, was built in 1903–4, and is used as a relief light-vessel in the Twelfth and Thirteenth light-house districts. During the past year she consumed about 81 tons of coal to operate the fog-signal alone, about 108 tons for her main engine, and about 178 tons additional for all other purposes, making a total consumption of about 367 tons. Light-vessel No. 76 arrived in San Francisco from Oregon on December 16, 1906, and on January 2 relieved light-vessel No. 70, off San Francisco. While on this station a barkentine collided with her on January 12,

1907, inflicting slight damage. She returned to San Francisco on February 11 for extensive repairs to her hull and machinery. She was dragged out of position during a severe storm on March 22 and was replaced on March 25. On April 26, 1907, she returned to San Francisco. On July 13, 1907, after being repaired, she proceeded to Astoria, Oreg. While the repairs to hull and machinery were under way, an evaporating and distilling plant, shipped out from the East, was installed on this vessel. The usual inspection of boilers and machinery was made by the United States local inspectors.

Relief light-vessel for the Pacific coast.—The act approved on March 4, 1907, appropriated $130,000 for a relief light-vessel for use in the Twelfth light-house district. She is now being built by contract, which provided that she shall be finished within the year.

FOG-SIGNALS OPERATED BY STEAM OR OIL ENGINES.

14. Point Conception, California.—This 12-inch steam whistle, in duplicate, was in operation some 440 hours and consumed about 35 cords of wood, about 19 tons of coal, and about 105 gallons of crude oil.

15. Point Arguello, California.—This 12-inch whistle, in duplicate, worked by a 13-horsepower oil engine and compressed air, was in operation some 1,267 hours and consumed about 2,448 gallons of mineral oil.

16. San Luis Obispo, California.—This 10-inch steam whistle, in duplicate, was in operation some 1,158 hours and consumed about 68 tons of coal and about 2,631 gallons of crude oil.

17. Piedras Blancas, California.—This 10-inch whistle, worked by a 20-horsepower oil-engine air compressor, was in operation some 938 hours and consumed about 2,145 gallons of mineral oil.

18. Point Sur, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,246 hours and consumed about 112 cords of wood.

21. Año Nuevo Island, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,107 hours and consumed about 78 tons of coal.

22. Pigeon Point, California.—This signal, consisting of one 10-inch and one 12-inch steam whistle, was in operation some 1,002 hours and consumed about 93 cords of wood.

23. Point Montara, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,544 hours and consumed about 152 cords of wood.

24. Farallon, California.—This first-class steam siren, in duplicate, was in operation some 1,134 hours and consumed about 81 tons of coal.

25. San Francisco light-vessel, No. 70, California.—This 12-inch steam chime whistle, in duplicate, was in operation some 846 hours and consumed about 42 tons of coal.

26. Bonita Point, California.—This first-class steam siren, in duplicate, was in operation some 993 hours and consumed about 6 tons of coal and about 14,177 gallons of crude oil.

27. Mile Rocks, California.—This 10-inch whistle, in duplicate, worked by a 20-horsepower oil-engine air compressor, was in operation some 988 hours and consumed about 2,585 gallons of mineral oil.

28. Fort Point, California.—This second-class Daboll trumpet, in duplicate, worked by a 5-horsepower oil-engine air compressor, was in operation some 963 hours and consumed about 772 gallons of mineral oil.

29. Lime Point, California.—This 12-inch steam whistle, in duplicate, was in operation some 860 hours and consumed about 21 tons of coal and 19,312 gallons of crude oil.

34. Yerba Buena, California.—This 10-inch steam whistle, in duplicate, was in operation some 124 hours and consumed about 27 tons of coal.

41. East Brother Island, California.—This 12-inch steam whistle was in operation some 137 hours and consumed about 23 tons of coal.

56. Point Reyes, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,658 hours and consumed about 88 tons of coal and about 11,502 gallons of crude oil.

57. Point Arena, California.—This signal, consisting of one 10-inch and one 12-inch steam whistle, was in operation some 1,334 hours and consumed about 97 cords of wood.

60. Blunts Reef light-vessel, No. 83, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,277 hours and consumed about 60 tons of coal.

61. Humboldt, California.—This signal, consisting of one 10-inch and one 12-inch steam whistle, was in operation some 768 hours and consumed about 68 cords of wood.

72. St. George Reef, California.—This 12-inch steam whistle, in duplicate, was in operation some 1,175 hours and consumed about 56 tons of coal.

BUOYAGE.

The buoyage of this district continues in good condition.

LIGHT-HOUSE DEPOT.

Yerba Buena, San Francisco Bay, California.—This is the only light-house depot in the Twelfth light-house district, and here are kept all the supplies and buoys for the district. Fire hydrants were added to the water system. Two rooms and two baths for the use of the watchman and blacksmith were added. Various repairs were made.

TENDERS.

Madroño.—This iron screw steamer, built in 1885, is of about 412 tons gross burden. She changed, placed, or replaced 74 buoys, landed some 1,176 tons of coal and 60,633 gallons crude oil at 28 stations, delivered other supplies at 44 stations, and visited 196 stations for inspection. In doing this she steamed about 10,166 miles, upon a consumption of some 919 tons of bituminous coal. The crew was employed at the light-house depot 310 hours, and the vessel has been laid up 29 days for repairs to hull and machinery.

Armeria.—This steel screw steamer was built in 1889–90, and is of 1,052 tons displacement. She arrived in San Francisco on January 9, 1907, 75 days from New York, via Coronel 16 days. While in this district she made one supply trip, landing mineral oil at all stations

between San Francisco and San Diego, and overhauling the buoyage. She sailed from San Francisco on March 7, 1907, and on March 10, 1907, arrived at Astoria, Oreg. From the time of her arrival in San Francisco on January 7 until her arrival at Tongue Point, Oregon, light-house depot on March 10, 1907, she steamed about 1,861 miles upon a consumption of some 304 tons of coal.

Yerba Buena.—This launch, built in 1906, is 42 feet in length and propelled by a 40-horsepower gasoline engine. She is used by the inspector in communicating with the light-house depot on Yerba Buena Island, and for distributing supplies to harbor stations. During the past year she ran about 1,487 miles on a consumption of some 1,781 gallons of gasoline.

Sequoia.—The act approved on June 30, 1906, appropriated $50,000 toward the construction of this tender. The act of January 2, 1907, authorized its construction at a cost of $215,000, and the act of March 4, 1907, appropriated $165,000, making the total appropriation $215,000 for the tender. She is now being built by a contract which provides that she should be finished within the year. The *Sequoia* is a schooner-rigged, steel steamer of 900 tons displacement. She measures 190 feet over all, with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion, inverted, direct-acting engines, driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch, by two Scotch boilers, 11 feet 9 inches in diameter, and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The foremast is of steel and forms the mast of a revolving steam derrick, adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys, which are now being practically tested by the Board.

HAWAIIAN LIGHT-HOUSE ESTABLISHMENT.

[Being a part of the Twelfth light-house district.]

On December 29, 1903, the Light-House Board was directed to take charge of the Hawaiian light-house service. The Board, with the approval of the Secretary of Commerce and Labor, at its session on January 4, 1904, ordered that "the boundaries of the Twelfth United States light-house district be extended so as to include within it the Hawaiian Islands and their dependencies."

The Comptroller of the Treasury, in the meantime, in response to the request of the Secretary of Commerce and Labor, made at the instance of the Light-House Board, had on December 23, 1903, decided that "the appropriations for the Light-House Establishment, so far as applicable thereto, could be expended for the maintenance of the light-houses and buoys" of Hawaii. Hence the Board found itself able to meet the expenses required to support the Hawaiian light-house service.

On December 28, 1903, the President by proclamation ordered that the light-house service of the Territory of Hawaii be taken over on January 1, 1904, and that the Department of Commerce and Labor,

through the Light-House Board, be charged with all the administrative duties relative thereto.

The light-houses of the Territory of Hawaii were taken over by the United States in accordance with the proclamation of the President. The Territory was then made a portion of the Twelfth light-house district by the Light-House Board, and assistants were assigned to the inspector and engineer of that district for duty in the subdivision.

This subdistrict includes the lights in the Hawaiian Islands.

Assistant to the inspector.—Lieut. James F. Carter, U. S. Navy.

Assistant to the engineer.—Capt. C. W. Otwell, Corps of Engineers, U. S. Army.

There are in this subdistrict:

Light-houses	29
Whistling buoys in position	1
Bell buoys in position	2
Other buoys in position	22
Day or unlighted beacons	18

LIGHT-STATIONS.

During the year all the stations have been inspected, supplied, and maintained as well as existing conditions would permit.

301. Pepeekeo Point, Island of Hawaii.—On March 1, 1907, the wooden trestle tower, 36 feet high, at this station, was removed, and the lens lantern was established 124 feet above the water, and 61 feet above the ground, on a white mast, having at its base a small white house with red roof and lead-colored trimmings.

302. Paukaa Point, Island of Hawaii.—On March 20, 1907, the wooden trestle tower, 25 feet high, at this station, was removed, and the lens lantern was established 155 feet above the water, and 32.7 feet above the ground, on a white mast, having at its base a small white house with red roof and lead-colored trimmings.

303. Cocoanut Point, Island of Hawaii.—A survey of the site for proposed concrete beacon was made, materials were purchased, but no construction work done.

308. Mahukona, Island of Hawaii.—On June 20 the lens lantern at this station was established 64 feet above the water, and 35 feet above the ground, on a white mast, having at its base a small white house with red roof and lead-colored trimmings. The new structure is 51 feet to the east and 11 feet to the south of the old structure.

309. Kauhola Point, Island of Hawaii.—A water tank was installed and minor repairs made.

313. Makanalua, Island of Molokai.—A dwelling for the keeper was erected, a water tank installed, and minor repairs made.

314. Kaunakakai Range front, Island of Molokai.—The mast from which the light is shown was blown down on December 24, 1906, and was restored in its original location.

317. The act approved on March 4, 1907, appropriated $60,000 for a light and fog-signal station on the north shore of Molokai Island, Hawaii. Plans and specifications for the structures are being considered. Measures are being taken to secure a site.

318. Makapuu Point, Island of Oahu.—The act approved on June 10, 1906, appropriated $60,000 for a light-station at Makapuu Point. A survey of the site was made and a deed was prepared. A road was completed to within about 600 feet of the proposed site for dwellings. Plans and specifications of the structures have been made, and work on the site will be begun soon.

319. Diamond Head, Island of Oahu.—A water supply was installed and a fence was built around the station.

320. Honolulu Range front, Island of Oahu.—Cement, wooden cylinders, iron, and steel were purchased. Workshop, office, and blacksmith shop were constructed on Sand Island, and a trestle was built from Sand Island wharf to the site of the light-house; test borings were made at the locations of the foundation cylinders, and nine cylinders were driven to the ledge, two cylinders were partially cleaned of material, and the cement was tested.

The Secretary of Commerce and Labor, the governor of the Territory, and representatives of the Light-House Board stationed at Honolulu, met in conference in August, 1907, when it was agreed, all concurring, that the site previously selected should be changed for another site. The change makes it necessary to increase the cost of the foundation of the rear range light about $4,000, and to expend some $6,000 in giving it additional height. The Board estimates that all this work can be done for a sum not exceeding $10,000, and it recommends that an appropriation of that amount be made therefor.

321. Honolulu Range rear, Island of Oahu.—A survey of the hillside site back of Honolulu was made.

322–327. Honolulu Harbor.—On December 5, 1906, channel lights numbered 3, 4, 5, 6, 7, and 8, each consisting of a lens lantern, 11 feet above the water on a single pile, were established to mark the 25-foot dredged channel into Honolulu Harbor.

The structure supporting light No. 4 was carried away December 31, and the light extinguished; it was rebuilt and the light reestablished February 18, 1907, 15 feet seaward of the original light.

329. Nawiliwili Harbor, Island of Kauai.—On December 22, 1906, the wooden trestle tower 45 feet high was removed, and the lens lantern was established 55 feet above the water, and 33½ feet above the ground, on a white mast, having at its base a small white house with red roof and lead-colored trimmings.

—. *Kilauea Point, Island of Kauai, Hawaii.*—There is now no landfall light at the Hawaiian Islands for the large traffic from the Orient. It is believed that a first-order light located in the vicinity of Kilauea Point, on the north coast of Kauai, would prove more satisfactory than if placed at Mana Point on the westerly coast, as previously recommended. With a first-order light at Kilauea Point the trans-Pacific commerce would be accommodated, leaving only certain additional beacon lights of the island type on the island to be installed for the benefit of interisland navigation. The Board therefore withdraws its recommendation for an appropriation of $60,000 for the establishment of a first-order light at Mana Point, Kauai, Hawaii, in favor of a light at Kilauea Point, Hawaii, so as to permit the location of the light at or near Kilauea Point, or such other point on Kauai Island as may be later determined to be most advantageous. It is estimated that this light can be established for

not exceeding $75,000, and the Board recommends that an appropriation of that amount be made therefor.

—. *Cape Kumukahi, Island of Hawaii.*—There is at present no landfall light for vessels bound to Hawaii by the way of Cape Horn. Several vessels have, within recent years, gone ashore on Kumukahi Point. This is the first land sighted by vessels from the southward and eastward. The shipping from these directions now merits consideration, and with the improvement of business at Hilo the necessity for a landfall light on this cape grows more urgent. It is estimated that a light at this point can be established for not exceeding $75,000, and the Board recommends that an appropriation of this amount be made therefor.

330. Midway Islands.—Minor repairs were made.

PRIVATE AIDS.

There are 18 private lights now maintained in Hawaiian waters. The policy of taking over or replacing these private lights from time to time, as funds are available, will be continued.

DAY OR UNLIGHTED BEACONS.

Pearl Harbor Entrance Range rear.—Blown down on February 4, 1907, and rebuilt on February 24, 1907.

Welles Harbor, Midway Islands.—Minor repairs were made.

BUOYAGE.

As there is at present no tender in this subdistrict, the buoyage is maintained under many difficulties. There are but few contractors who care to do buoy work. Their appliances are inadequate and their prices, when they do bid, are frequently excessive. There is practically but one bidder who has been willing to undertake buoy work at reasonable prices and at such time as the conditions and regulations require. Considering these difficulties, the buoyage of this subdistrict is in good condition. During the year all the buoys have been overhauled and replaced, and all established buoys are in their respective positions. Private range lights are now maintained at the leper settlement, Molokai Island, to mark the anchorage in Kalaupapa Harbor for vessels arriving at night.

LIGHT-HOUSE DEPOT.

The rented storehouse is small and sufficient only for a small workshop and storage room for a few supplies. The present arrangements have heretofore sufficed, due only to the courtesy of the local naval authorities in permitting a portion of their wharves to be used for light-house purposes.

A portion of the warehouse on the channel wharf has been used as a temporary light-house depot. A portion of one of the naval wharves is still used, by courtesy of the Navy Department, for the storage of buoys, buoy chain, and appendages, etc.

The following statement and recommendation, made in the Board's last two annual reports, is renewed:

Permission was obtained last year from the commandant of the United States naval station at Honolulu to temporarily occupy a part of one of the storehouses and a portion of one of the wharves, to be used, respectively, as a store-

house for light-house supplies, etc., and for the storage of buoys, chains, and buoy appendages. Both the portion of the storehouse and the part of the wharf assigned are still used for these purposes. A section of shelves and lockers was installed for the proper preservation of the light-house engineer's supplies, and a window was put in. The assistant light-keeper at Honolulu range light-station was promoted and assigned to duty as keeper of this light-house depot on August 1, 1904, it being understood that he would assist at the light-station in addition to his duties at the light-house depot. He has been busily employed during this time with these duties, mostly at the depot.

This temporary arrangement will be terminated when the Navy Department shall need the space, now courteously placed at the disposal of the Light-House Establishment, which may happen at any time in the near future. A light-house depot will probably be needed before it can be erected. It is estimated that a depot can be built here for $40,000, and the Board recommends that an appropriation of this amount be made therefor.

TENDER.

Kukui.—The act approved on March 4, 1907, appropriated $215,000 for a steam tender for the light-house service in Hawaiian and Pacific waters. The tender is being built under a contract which requires that she be finished and delivered in one year. The *Kukui* is a schooner rigged steel steamer of 900 tons displacement. She measures 190 feet over all, with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion inverted, direct-acting engines, driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam under a pressure of 190 pounds per square inch, by 2 Scotch boilers, 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The fore mast is of steel, and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys which are now being practically tested by the Board.

GUAM LIGHT-HOUSE ESTABLISHMENT.

On May 13, 1905, the President issued the following Executive order:

It is hereby directed that the Department of Commerce and Labor take charge of and use the proper measures for lighting and buoying the Guam Island waters, and have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

On May 16, 1905, the Secretary of Commerce and Labor wrote to the Light-House Board as follows:

Inclosed herewith is a copy of an Executive order issued by the President under date of May 13, 1905, directing that this Department take charge of and use the proper measures for lighting and buoying the Guam Island waters, and that proper estimates be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

It is desired that the instructions referred to be carried into effect and that the estimates specified be prepared and submitted for the Department's approval at as early a date as practicable.

The Board, at its meeting on June 2, 1905, considered this order of the President and that of the Department, and directed that the aids to navigation in the waters about the island of Guam, Pacific Ocean,

be placed within the boundaries of the Twelfth light-house district, and that the inspector and engineer of that district be directed to take charge of them.

In accordance with the Executive order to "have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation," the Board states that it is estimated that $25,000 will be needed, and it recommends that an appropriation of this amount be made therefor.

Midway Islands Light-House Establishment.

On December 8, 1904, the President issued the following Executive order:

It is hereby directed that the Department of Commerce and Labor take charge of and use the proper measures for lighting and buoying the Midway Islands waters, and have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

On December 9, 1904, the Secretary of Commerce and Labor wrote to the Light-House Board as follows:

Inclosed herewith is a copy of an Executive order issued by the President under date of December 8, 1904, directing that this Department take charge of and use the proper measures for lighting and buoying the waters about the Midway Islands, and that proper estimates be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

It is desired that these instructions be carried into effect and that the estimates specified be prepared and submitted for the Department's approval at as early a date as practicable.

On December 19, 1904, the Secretary of Commerce and Labor wrote to the Secretary of the Treasury as follows:

The President, by Executive order, having directed this Department to take charge of and use the proper measures for lighting and buoying the waters about the Midway Islands, and to have prepared proper estimates to be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation, this Department submits the following estimate:

"Light-houses, beacons, buoys, etc., in the waters about the Midway Islands Pacific Ocean: For the establishment of proper lights, with suitable light-keepers' dwellings, day beacons, buoys, and storehouses, with a wharf and landing place at the Midway Islands, Pacific Ocean, $111,000."

The Board, at its session on January 2, 1905, adopted the following resolution:

Ordered, That the boundaries of the Twelfth light-house district be extended to include within it the Midway Islands waters.

Samoan Light-House Establishment.

On July 3, 1905, the President issued the following Executive order:

It is hereby directed that the Department of Commerce and Labor take charge of and use the proper measures for establishing and maintaining lights and other aids to navigation in the waters of the island of Tutuila and other islands of the Samoan Islands east of longitude 171° west, and have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

On July 6, 1905, the Department of Commerce and Labor wrote to the Light-House Board as follows:

Inclosed herewith is a copy of an Executive order issued by the President, under date of July 3, 1905, directing that this Department take charge of and use the proper measures for establishing and maintaining lights and other aids to navigation in the waters of the island of Tutuila and other islands of the Samoan group east of longitude 171° west, and that proper estimates be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

It is desired that the instructions referred to be carried into effect and that the estimates specified be prepared and submitted for the Department's approval.

In accordance with the Executive order to "have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation," the Board states that it is estimated that $25,000 will be needed, and it recommends that an appropriation of this amount be made therefor.

The Board considered the foregoing orders of the President and of the Department of Commerce and Labor and ordered that the aids to navigation in the waters of the American Samoan Islands be embraced in the boundaries of the Twelfth light-house district, which was charged with the care of these aids; also, that the lights now maintained in the waters of the American Samoan Islands by the United States Navy be taken over and maintained by the Light-House Board.

be placed within the boundaries of the Twelfth light-house district, and that the inspector and engineer of that district be directed to take charge of them.

In accordance with the Executive order to "have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation," the Board states that it is estimated that $25,000 will be needed, and it recommends that an appropriation of this amount be made therefor.

Midway Islands Light-House Establishment.

On December 8, 1904, the President issued the following Executive order:

It is hereby directed that the Department of Commerce and Labor take charge of and use the proper measures for lighting and buoying the Midway Islands waters, and have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

On December 9, 1904, the Secretary of Commerce and Labor wrote to the Light-House Board as follows:

Inclosed herewith is a copy of an Executive order issued by the President under date of December 8, 1904, directing that this Department take charge of and use the proper measures for lighting and buoying the waters about the Midway Islands, and that proper estimates be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

It is desired that these instructions be carried into effect and that the estimates specified be prepared and submitted for the Department's approval at as early a date as practicable.

On December 19, 1904, the Secretary of Commerce and Labor wrote to the Secretary of the Treasury as follows:

The President, by Executive order, having directed this Department to take charge of and use the proper measures for lighting and buoying the waters about the Midway Islands, and to have prepared proper estimates to be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation, this Department submits the following estimate:

"Light-houses, beacons, buoys, etc., in the waters about the Midway Islands Pacific Ocean: For the establishment of proper lights, with suitable light-keepers' dwellings, day beacons, buoys, and storehouses, with a wharf and landing place at the Midway Islands, Pacific Ocean, $111,000."

The Board, at its session on January 2, 1905, adopted the following resolution:

Ordered, That the boundaries of the Twelfth light-house district be extended to include within it the Midway Islands waters.

Samoan Light-House Establishment.

On July 3, 1905, the President issued the following Executive order:

It is hereby directed that the Department of Commerce and Labor take charge of and use the proper measures for establishing and maintaining lights and other aids to navigation in the waters of the island of Tutuila and other islands of the Samoan Islands east of longitude 171° west, and have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

On July 6, 1905, the Department of Commerce and Labor wrote to the Light-House Board as follows:

Inclosed herewith is a copy of an Executive order issued by the President, under date of July 3, 1905, directing that this Department take charge of and use the proper measures for establishing and maintaining lights and other aids to navigation in the waters of the island of Tutuila and other islands of the Samoan group east of longitude 171° west, and that proper estimates be submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation.

It is desired that the instructions referred to be carried into effect and that the estimates specified be prepared and submitted for the Department's approval.

In accordance with the Executive order to "have estimates prepared by the Light-House Establishment and submitted to Congress for an appropriation to defray the expenses of the establishment and maintenance of these aids to navigation," the Board states that it is estimated that $25,000 will be needed, and it recommends that an appropriation of this amount be made therefor.

The Board considered the foregoing orders of the President and of the Department of Commerce and Labor and ordered that the aids to navigation in the waters of the American Samoan Islands be embraced in the boundaries of the Twelfth light-house district, which was charged with the care of these aids; also, that the lights now maintained in the waters of the American Samoan Islands by the United States Navy be taken over and maintained by the Light-House Board.

engines and air compressors operating 6-inch automatic sirens in duplicate, was installed.

235. Battery Point, Washington.—The act approved on June 28, 1902, appropriated $6,000 for the establishment of a fog-signal at Battery Point, Puget Sound, opposite Seattle, Wash. The act approved on February 26, 1907, appropriated, in addition, $8,000 for this purpose. Renewed efforts will be made to secure a site.

238. Robinson Point, Washington.—Bids for erecting the keeper's dwelling were received, but, being in excess of the amount available, were rejected. A working party with material for building the dwelling was landed at the station, and the structure will be completed early in the coming season.

239. Browns Point, Washington.—A detached, galvanized-iron oil-house was built. A small storage room was made in basement of dwelling. The main sewer was extended.

247. Muckilteo Point, Washington.—The reservation was inclosed by a fence, and cement monuments marking the boundary of the reservation were made and placed in position. Various repairs were made.

260. Burrows Island, Washington.—A fence and other small structures were erected. Various repairs were made.

—. *Resurrection Bay, Alaska.*—The following is a copy of a letter dated February 21, 1906, from the Department of Commerce and Labor to the Senate Committee on Commerce, in reply to its letter inclosing for its consideration a copy of Senate bill No. 4336, "To establish a light and fog-signal station at the entrance to Resurrection Bay, Alaska:"

Referring to the committee's letter of February 13, 1906, inclosing, for the consideration of this Department and for report thereon, a copy of Senate bill No. 4336, "To establish a light and fog-signal station at the entrance to Resurrection Bay, Alaska," I have the honor to state that this matter has been under consideration by the Light-House Board for over two years, who report in effect that it is found that the actual needs of commerce do not now require the construction of this light and fog-signal, particularly as there are many other localities where the necessity for aids to navigation is more urgent.

It is noted that the bill in question authorizes the construction of this light and fog-signal "at a cost not to exceed twenty-five thousand dollars," while the only estimate which has been made by the Light-House Board indicates that such a light and fog-signal can not be built for less than $100,000.

The Board therefore recommends that an appropriation of $100,000 be made for this purpose.

—. *Cape Spencer, entrance to Cross Sound, Alaska.*—The following is a copy of a letter dated February 1, 1906, from the Department of Commerce and Labor to the Senate Committee on Commerce, in reply to its letter inclosing for consideration a copy of Senate bill No. 2705, "To establish a light-house and fog-signal on Cape Spencer, at the entrance to Cross Sound, in the district of Alaska:"

Referring to the committee's letter of January 9, 1906, inclosing for the consideration of this Department and for report thereon, a copy of Senate bill No. 2705, "To establish a light-house and fog-signal on Cape Spencer at the entrance to Cross Sound, in the district of Alaska," I have the honor to state that upon investigation by the Light-House Board it appears that the commerce passing Cape Spencer through Cross Sound is now considerable, and that it is rapidly increasing with the development of southwestern Alaska, and that it

is deemed advisable that a suitable light and fog-signal should be placed at this point.

This Department, concurring with the views of the Light-House Board, has the honor to recommend the passage of this bill.

272. Turn Point, Washington.—A sewer was laid from dwellings to the edge of the bluff. Steps were built from the top of the bluff to the beach, walks were laid, and minor repairs were made.

277. Hog Rocks, Revillagigedo channel, Alaska.—A construction party is now erecting this beacon.

278. Idaho Rock Float, Tongass Narrows, Alaska.—A float with post-lantern light, was recently placed on this dangerous menace to navigation.

286. Killisnoo Harbor Southern Entrance light, Chatham Strait, Alaska.—The beacon was rebuilt.

287. Killisnoo Harbor light, Chatham Strait, Alaska.—The beacon was rebuilt.

294. Cape Hinchinbrook light and fog-signal station, entrance to Prince William Sound, Alaska.—The act approved on June 30, 1906, appropriated $25,000 toward this light and fog-signal station and authorized a contract therefor at a cost not to exceed $125,000. The act approved on March 4, 1907, appropriated $50,000 more for continuing this work. In order to satisfy this contract a further appropriation of $50,000 is needed, and the Board recommends that an appropriation of this amount be made therefor.

DAY BEACONS.

Beacon No. 8, Yaquina Bay, Oregon.—A new pile was driven for this beacon.

Beacon No. 10, Yaquina Bay, Oregon.—A new pile was driven for this beacon.

Beacon No. 12, Yaquina Bay, Oregon.—A new pile was driven for this beacon.

Beacon No. 4, Columbia River.—Discontinued.

Beacon No. 2, Willapa Bay, Washington.—A new pile was driven for this beacon.

Beacon No. 1, Willapa Bay, Washington.—A new pile was driven for this beacon.

Beacon No. 8, Willapa Bay, Washington.—A new pile was driven for this beacon.

Beacon No. 10, Willapa Bay, Washington.—This beacon was established during the year.

Point Lockwood, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Keene Island or East Ledge, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Burnt Island Ledge, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Bush Top Island, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Anchor Point, Wrangell Strait, Alaska.—A large, conspicuous, wooden beacon is under construction here.

Vexation Point, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

South Green Rock, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

North Green Rock, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Green Point, Wrangell Strait, Alaska.—A large, conspicuous, wooden beacon is under construction here.

North End Middle Ground, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

Prolewy Rock, Wrangell Strait, Alaska.—A concrete beacon will be completed here soon.

POST LIGHTS.

These lights are efficient aids to navigation in the inland waters of Oregon, Washington, and Alaska, and their numbers could be still further increased with great advantage to commerce. With few exceptions these lights were inspected during the year, and, where needed, the structures were painted, repaired, or rebuilt. Few complaints were received of the operation of these lights and the work of laborers in charge was generally satisfactory. The usefulness of these aids to navigation is generally recognized, and requests for additional lights are being constantly received. Twenty-four post lights were established and one was discontinued.

LIGHT-VESSELS.

97. Columbia River light-vessel, No. 50, Oregon.—This composite vessel, built at San Francisco in 1892, is of about 470 tons displacement and is equipped with a steam fog-signal. On October 9, 1906, after being repaired, she resumed her station, and light-vessel No. 67 was brought in. During a gale on May 9, 1907, light-vessel No. 50 broke adrift and was towed in by a tug. After being coaled, provisioned, and fitted with new ground tackle on May 13, 1907, she resumed station. The act approved on March 4, 1907, appropriated $80,000 for completing a steel, steam, self-propelling light-vessel with a fog-signal for use off the mouth of Columbia River, Oregon. This vessel is being built under a contract which requires that she shall be delivered within a year.

212. Umatilla Reef light-vessel, No. 67, Washington.—This steel, steam, self-propelling light-vessel, built at Portland, Oreg., in 1897, is of 380 tons net burden, and is equipped with a steam fog-signal. She occupied the station of light-vessel No. 50 off the mouth of the Columbia River until October 9, 1906, when she steamed to the light-house depot, and, after she was repaired, coaled, and provisioned, steamed to her station on November 2, 1906, replacing relief light-vessel No. 76, which temporarily occupied the station.

—. *Relief light-vessel, No. 76.*—This steel, steam, self-propelling light-vessel has a displacement of 578 tons, was built in 1903–4, and is equipped with a steam whistle for a fog-signal. She occupied the station of light-vessel No. 67, off Umatilla Reef, until November 2, 1906, and then remained at the light-house depot until December 10, 1906, when she was sent to the Twelfth light-house district.

—. *Light-vessel off Orford Reef, 5 miles north of Cape Blanco, Oregon.*—The following is a copy of a letter dated December 14, 1903,

from the Secretary of Commerce and Labor to the Secretary of the Treasury:

This Department, at the instance of the Light-House Board, recommends that an appropriation of $120,000 be made for the establishment of a light-vessel off Orford Reef, about 1 mile north of Fox Rock and 5 miles north of Cape Blanco, Oregon. The Light-House Board called upon the inspector and engineer of the Thirteenth light-house district for a joint report on the necessity for the establishment of a fog-signal at Cape Blanco, Oregon, and the following is an extract from that report:

"The group of islands and rocks known as Orford Reef lies 5 miles off Cape Blanco and extends 2½ miles north and south and 1½ miles east and west. It includes no less than 47 dangers, many of which rise abruptly, so that a vessel may be in great danger while in 30 fathoms of water. Fogs are very prevalent in this region, and the currents are strong and irregular. A strong inshore eddy or countercurrent sets to the northward and eastward off Cape Blanco, and often carries vessels into hazardous positions. As the reef lies off the most westerly cape on the coast, vessels make it a turning point in fine weather, and often find themelves too close in during fogs. All these conditions render this obstacle a serious danger to navigation. Nevertheless it is not easy to recommend aids which would remedy these dangers.

"Were a fog-signal erected near the present light-house at Cape Blanco and made powerful enough to be heard 8 miles, a navigator shaping his course tangent to that circle of audibility would pass within 3 miles of the reef. Any error in his calculations or a strong eddy current might bring him into danger.

"Moreover, it is not safe to neglect well-known facts concerning aberrations of audibility of fog-signals. Off Tillamook Rock a zone of inaudibility has been found between 2 and 4 miles westward of the light. There is no reason to anticipate greater certainty or regularity off Cape Blanco.

"The seaward face of that cape is a steep cliff of 200 feet elevation. This elevation and the exposure to strong winds might combine in causing aberrations of audibility and difficulty in determining the source of sound, thus confusing navigators trying to pass outside the reef. Therefore we are unable to recommend the construction of a fog-signal at this point.

"A first-class light and fog-signal on one of the larger islets of the reef would be less liable to these objections and would greatly reduce the dangers to navigation in this vicinity. The largest of these islets is Table Rock, which lies 3 miles south of Cape Blanco and 2¼ miles NE. by N. of the outer rock of this group. It is described as nearly circular and about 150 yards in diameter, rising almost vertically to a rounding flat top 147 feet above the sea. It is surrounded by sunken rocks, preventing the approach of a vessel, and the surf is heavy around its base throughout the year. We are not prepared to recommend that the vast expense of constructing and maintaining a light in this vicinity should be incurred at present. Should such a station be constructed at any time the light on Cape Blanco might be discontinued."

It is estimated that this vessel can be built for not exceeding $130,000, and the Board recommends that an appropriation of that amount be made therefor.

214. Swiftsure Bank light-vessel, No. 93, entrance to Juan de Fuca Strait, Washington.—The act approved on March 4, 1907, appropriated $130,000 for the construction of this vessel. She is being built under a contract which provides that she shall be finished within the year.

FOG-SIGNALS OPERATED BY STEAM OR OIL ENGINES.

74. Coquille River, Oregon.—This Daboll trumpet was in operation about 541 hours and consumed some 11 tons of coal. The boilers were replaced on June 22, 1907, by oil engines operating a compressed-air plant, and during the remainder of the year the signal was sounded about 42 hours and consumed some 22 gallons of oil.

75. Cape Arago, Oregon.—This Daboll trumpet was in operation about 652 hours and consumed some 10 tons of coal.

96. Tillamook Rock, Oregon.—This first-class siren was in operation about 405 hours and consumed some 13 tons of coal.

97. Columbia River light-vessel, No. 50.—While on her station her 12-inch steam fog whistle was in operation about 499 hours and consumed some 33 tons of coal.

105. Desdemona Sands, Oregon.—This Daboll trumpet was in operation about 97 hours and consumed some 62 gallons of oil.

205. Grays Harbor, Washington.—This first-class steam siren was in operation about 853 hours and consumed some 66 tons of coal.

211. Destruction Island, Washington.—This first-class steam siren was in operation about 571 hours and consumed some 36 tons of coal.

212. Umatilla Reef light-vessel, No. 67.—From November 2, 1906, her 12-inch steam whistle was in operation some 305 hours and consumed about 14 tons of coal. While on the station of light-vessel No. 50, from July 1 to October 9, 1906, the signal was in operation about 205 hours and consumed some 13 tons of coal.

Relief light-vessel, No. 76.—This vessel occupied the station of Umatilla Reef from the beginning of the fiscal year and until November 2, 1906, when her 12-inch steam whistle was in operation about 533 hours and consumed some 33 tons of coal.

217. Slip Point, Washington.—This Daboll trumpet was in operation about 304 hours and consumed some 197 gallons of oil.

221. New Dungeness, Washington.—The 12-inch steam whistle was in operation from July 1, 1906, until March 1, 1907, when it was replaced by a modern, compressed-air plant operated by 25-horsepower oil engines, the entire plant being in duplicate. During that time the steam whistle sounded about 427 hours and consumed some 25 tons of coal. When replaced by compressed-air signal, that was in operation about 89 hours and consumed some 269 gallons of oil.

224. Point Wilson, Washington.—This 12-inch steam fog whistle was in operation about 411 hours and consumed some 32 tons of coal.

230. Point No Point, Washington.—This Daboll trumpet was in operation about 675 hours and consumed some 656 gallons of oil.

234. West Point, Washington.—This Daboll trumpet was in operation about 445 hours and consumed some 141 gallons of oil.

238. Robinson Point, Washington.—This 12-inch steam whistle was in operation about 212 hours and consumed some 15 tons of coal.

247. Muckilteo Point, Washington.—This Daboll trumpet was in operation about 518 hours and consumed some 259 gallons of oil.

260. Burrows Island, Washington.—This Daboll trumpet was in operation about 329 hours and consumed some 215 gallons of oil.

272. Turn Point, Washington.—This Daboll trumpet was in operation about 129 hours and consumed about 25 gallons of oil.

273. Patos Island, Washington.—This Daboll trumpet was in operation about 192 hours and consumed about 47 gallons of oil.

274. Semiamoo Harbor, Washington.—This Daboll trumpet was in operation about 391 hours and consumed about 267 gallons of oil.

275. Tree Point, Washington.—This first-class, compressed-air, automatic siren was in operation about 89 hours and consumed about 146 gallons of oil.

276. Mary Island, Alaska.—This Daboll trumpet was in operation some 53 hours and consumed about 36 gallons of oil.

281. Lincoln Rock, Alaska.—This Daboll trumpet was in operation some 85 hours and consumed about 50 gallons of oil.

284. Southeast Five-Finger Islands, Alaska.—This Daboll trumpet was in operation some 448 hours and consumed about 123 gallons of oil.

290. Sentinel Island, Alaska.—This Daboll trumpet was in operation some 233 hours and consumed about 114 gallons of oil.

292. Eldred Rock, Alaska.—This first-class, compressed-air, automatic siren was in operation some 428 hours and consumed about 759 gallons of oil.

295. Scotch Cap, Alaska.—This 10-inch compressed-air whistle was in operation about 224 hours and consumed about 691 gallons of oil.

296. Cape Sarichef, Alaska.—This first-class, compressed-air, automatic siren was in operation about 88 hours and consumed about 176 gallons of oil.

OILHOUSES.

204. Willapa Bay, Washington.—A galvanized-iron oilhouse was built here.

239. Browns Point, Washington.—A galvanized-iron oilhouse was built here.

BUOYAGE.

Many buoys were cleaned, renovated, or changed. In general, the buoyage is in fairly satisfactory condition. Numerous accidents to buoys were reported, some due to floating ice, but in most cases they were caused by large unmanageable tows colliding with the buoys. Accidents of this nature were investigated and when the offenders were ascertained the masters were reported to the local inspectors of the district with a view of having licenses suspended. This system has had a salutary effect, such accidents becoming less frequent. Whenever buoys went adrift every effort was made to recover and replace them as soon as practicable.

LIGHT-HOUSE DEPOT.

Tongue Point, Columbia River, Oregon.—This is the only depot in the district and is used to store supplies, fuel, buoys, and the like. Whenever available the crews of the tenders cleaned and painted the buoys stored here. Various repairs were made.

LIGHT-HOUSE TENDERS.

Manzanita.—This worn-out tender was sold to the highest bidder for $13,341, and she was turned over to him on September 3, 1906. Suit was brought against the city of Portland, Oreg., in the sum of $16,867, for damages sustained by the *Manzanita* when sunk by a dredge in tow of a tug, both the property of that city. The case was brought to trial in March, 1907, in the United States district court. The decision may be expected soon.

Heather.—This single-screw steamer was built in 1903, and is of 731 tons displacement. During the year she steamed about 15,113 miles and consumed some 1,758 tons of coal. She was under steam some 331 days, and her machinery was in motion about 68 days. Some 202 tons of supplies and 584 tons of coal were delivered at

light-stations, etc., for the inspector, and 16 tons of freight and 3,000 feet of lumber for the engineer. Some 171 buoys were cleaned, changed, or replaced, and 4 new aids to navigation were established. About 639 hours were spent at the light-house depot, when the crew cleaned buoys and did other necessary depot and ship's work. She received needed repairs, fitments, and supplies.

Armeria.—This steel-screw steamer was built in 1889–90, and is of 1,052 tons displacement. This vessel reported for duty here on March 10, 1907, and proved an efficient vessel for the required extended Alaskan cruise, being of sufficient carrying capacity to carry all yearly supplies, provisions, and coal for the stations in that section. She steamed in this district some 5,812 miles and consumed about 1,046 tons of coal. She was under steam about 101 days, and her machinery was in motion 28 days. She delivered about 60 tons of supplies and 278 tons of coal at light-stations, and 24 tons of freight, 120 gallons of gasoline, and 5,000 feet of lumber for repairs, and 740 gallons of distillate were landed at Ketchikan, Alaska, for the Forestry Reserve Service. Some 32 buoys were cleaned, changed, or replaced, and 6 new aids to navigation were established. About 736 hours were spent at the light-house depot, when the crew cleaned buoys and did other necessary depot and ship's work. She received needed repairs, fitments, and supplies.

New tender Manzanita.—The act approved on June 23, 1907, appropriated $215,000 for the construction of a new steam tender to replace the *Manzanita*. She is now being built under a contract which requires that she shall be delivered in the year. The *Manzanita* is a schooner-rigged steel steamer of 900 tons displacement. She measures 190 feet over all with 173 feet 4 inches load water line, has 30 feet beam, 12 feet draft, 12½ knots speed, and 1,000 horsepower. Her machinery consists of two triple-expansion inverted, direct-acting engines driving bronze propellers 7 feet 6 inches in diameter, and is supplied with steam, under a pressure of 190 pounds per square inch, by two Scotch boilers, 11 feet 9 inches in diameter and 12 feet long. She is fitted throughout with all modern appliances, including electric lights and a searchlight. The formast is of steel and forms the mast of a revolving steam derrick adapted for hoisting a load of 20 tons. She has a buoy deck nearly 50 feet long, which is needed in handling the new acetylene buoys which are now being practically tested by the Board.

Columbine.—This steel screw steamer was built in 1903, and is of 730 tons displacement. During the year she steamed some 16,203 miles and consumed about 1,524 tons of coal. She delivered 84,000 feet of lumber, 283 tons of building materials and supplies for building purposes, and 90 tons of coal; also about 24,000 gallons of fresh water and 95 tons of supplies for the maintenance of keepers. She cleaned, painted, overhauled or established 750 buoys, and she towed relief light-vessel No. 76 from Neah Bay to Astoria. She assisted the steamship *Oregon* when wrecked, in September, 1906, near Cape Hinchinbrook, Alaska, where some 114 passengers and crew, baggage, and express, were picked up and landed at Valdez. Two trips were made to Alaska, one in September, 1906, and the other in April, 1907, when the materials needed for the construction of permanent beacons in southeastern Alaska were delivered. She received needed repairs, supplies, and fitments.

FOURTEENTH DISTRICT.

The Fourteenth district extends on the Ohio River from Pittsburg, Pa., to Cairo, Ill., 966 miles; on the Tennessee River, 255½ miles, and on the Great Kanawha, 73½ miles—in all a distance of 1,295 miles—and embraces all the aids to navigation within these limits.

Inspector.—Commander James H. Oliver, U. S. Navy, to April 8, 1907; since then Commander William Braunersreuther, U. S. Navy.

Engineer.—Maj. James G. Warren, Corps of Engineers, U. S. Army, to September 12, 1906; since then Lieut. Col. William T. Rossell, Corps of Engineers, U. S. Army.

In this district there are:

Post lights:	
Monongahela River	48
Ohio River	429
Kanawha River	36
Tennessee River	46
Total	559
Floating lights:	
Ohio River	34
Tennessee River	2
Total	36
Laborers attending post lights and daymarks on June 30, 1907	552
Steam tender *Goldenrod* for supply and inspection	1

TENDER.

Goldenrod.—This is a steel stern-wheel steamer. She was built in 1888 and is of 144 gross tons burden. She steamed about 5,933 miles and consumed some 792 tons of coal. She made two trips of inspection and supply. Her first trip was begun on October 1, 1906, and ended on December 4. During this trip the lights were supplied and left in good condition; brush and obstructions were removed and posts were painted. During this trip 14 lights were established on the Monongahela River, which was added to this district during the fiscal year. On account of the low bridges over this river the tender could not go above Monongahela City, and it was impracticable to secure a boat temporarily for this purpose.

On December 10, 1906, the *Goldenrod* left Cincinnati for Louisville, and remained there until March 9, 1907, in winter quarters in the Louisville and Portland Canal. On March 9 she left Louisville for Cincinnati, where she arrived the next day. Between March 10

and 24 preparations were made and supplies were taken on board for the spring trip. On March 25 she left for the lower Ohio and Tennessee rivers. On the completion of the inspection of the Tennessee, and the Ohio River below Paducah, on April 11, 1907, the *Goldenrod* left for Cairo, Ill., and after planting four spar buoys on the left of the channel above the bridge she started to complete the inspection of the Ohio River above Paducah. She reached Cincinnati on April 29. On May 3 she left for the upper Ohio and Kanawha and to complete the establishment of the lights on the Monongahela River. On May 9 to 12 she was tending lights between Wheeling and Pittsburg. Army steamer, the *Swan*, was borrowed to establish lights on the Monongahela River. From May 13 to 18, inclusive, the 14 lights previously established were supplied, and 34 additional lights were added. From May 21 to June 5 the inspection was completed of the upper Ohio from Wheeling to Cincinnati and the Kanawha River, the tender arriving on June 5, 1907, at Cincinnati.

WORK DONE BY THE GOLDENROD.

Lights established	55
Lights discontinued	6
Spar buoys planted	4
Trees cut	3,412
Acres of brush cut	4
Posts moved	4
Posts reset	109
Gallons of oil distributed	17,268
Gross of wick distributed	68

FIFTEENTH DISTRICT.

The Fifteenth district extends on the Mississippi River from the head of navigation to Cairo, Ill.; on the Missouri River to Kansas City, and on the Illinois River to La Salle, and includes all the aids to navigation within those limits.

Inspector.—Commander William B. Caperton, U. S. Navy, until April 15, 1907; since then, Commander Louis S. Van Duzer, U. S. Navy.

Engineer.—Maj. Thomas L. Casey, Corps of Engineers, U. S. Army, until September 1, 1906; since then, Col. Clinton B. Sears, Corps of Engineers, U. S. Army.

There are in the district:

Number of lights fixed and floating on June 30, 1907	500
Lights established	56
Lights discontinued	50
Number of daymarks, June 30, 1907	249
Daymarks established	233
Daymarks discontinued	36
Laborers attending post lights on June 30, 1907	345
Number of trees over 4 inches in diameter cut down	8,474
Number of acres cleared of willows and underbrush, about	107
Number of gallons of oil issued	12,101
Steamer *Lily*, for supply and inspection	1
Steamer *Dandelion* for buoy service	1

During the fall of 1906 navigation closed as follows:

Mississippi River.

St. Paul, Minn., to Rock Island, Ill	Nov. 12
Rock Island, Ill., to New Boston, Ill	Nov. 19
New Boston, Ill., to Keokuk, Iowa	Nov. 12
Keokuk, Iowa, to Canton, Mo	Nov. 18
Canton, Mo., to Hamburg, Ill	Nov. 12
Hamburg, Ill., to Alton, Ill	Dec. 13
Alton, Ill., to St. Louis, Mo	Dec. 15
St. Louis, Mo., to Cairo, Ill	Dec. 25

Illinois River.

Sand Point, Ill., to Peoria, Ill	Nov. 9
Peoria, Ill., to Beardstown, Ill	Nov. 30
Beardstown, Ill., to Naples, Ill	Dec. 4
Naples, Ill., to mouth of Illinois River	Dec. 13

During the spring of 1907 navigation opened as follows:

Mississippi River.

Muscatine, Iowa, to New Boston, Ill	Apr. 1
Keokuk, Iowa, to Canton, Mo	Apr. 1
St. Paul, Minn., to Montrose, Iowa	Apr. 20
Montrose, Iowa, to Keokuk, Iowa	Mar. 23
Canton, Mo., to Cap Au Gris, Mo	Apr. 23
St. Louis, Mo., to Cairo, Ill	Mar. 5
St. Louis, Mo., to Grafton, Ill	Mar. 6
Grafton, Ill., to Cap Au Gris, Mo	Mar. 27

(These last lights were lit on the nights of March 9, 10, 11, 16, 17, 18, 23, 24, and 25 prior to above date.)

Illinois River.

Mouth Illinois River to Naples, Ill.	Mar. 6
Naples, Ill., to Peoria, Ill.	Apr. 10
Peoria, Ill., to Sand Point, Ill.	May 1

MISSISSIPPI RIVER.

The dams in the upper Mississippi are becoming more numerous each year, and the necessity of adequate buoyage is increasing rapidly. In this region barrel buoys of medium size, painted white, are used at present. The color is white, without regard to the side of the channel on which they are placed or the character of the obstruction, because the principal use of these buoys is for night navigation and white buoys light up so much better under the searchlight (with which all western river steamers are now fitted). If considered desirable these barrel buoys could be painted with red or black bands, to indicate the side of the channel on which they are placed. Owing to swift currents and the great variation in depth of water, no satisfactory spar buoy has so far been devised, but a new type with enlarged conical base, weighted at the heel, will have the anchor line attached at a point near the center of pressure of the vertical plane through the submerged portion, and it is hoped that such a buoy can be kept nearly vertical in a strong current. Spar buoys of the ordinary type are not only useless because forced under by the current, but are a source of danger to vessels bound up the river, as they are easily drawn into the paddle wheels, with disastrous results. In the lower part of the district, from Keokuk down, a 75-gallon barrel buoy is used. In this part of the river the crossings are longer, the distances at which the buoys should be seen are greater, and there are no rafts to break them adrift. The lighting of the bridges is now satisfactory.

ILLINOIS RIVER.

The Illinois River differs greatly from the Mississippi. It has a feeble current, as there is very little fall between its mouth and the head of navigation; and the natural current is further checked by several dams, which may be passed over at high water. At low water vessels must use the locks at the ends of the dams.

The current of the Illinois, being feeble, rarely cuts the banks, so that the lights and daymarks are seldom moved. Two trips of the tender *Lily* each year are found sufficient to attend to all matters in the river. There are about 45 lights on an average in this river during the year.

MISSOURI RIVER.

No lights are now maintained in the Missouri River nor have been since September, 1896, and the tender made its last visit there in April, 1898. The rapid current, numerous snags, and the frequent and sudden changes in the depths and positions of channels render the ordinary aids to navigation almost valueless, unless tended constantly.

Recently, during the summer of 1907, two or three steamboats commenced running between Kansas City and St. Louis. Should the traffic warrant it, such lights as are needed will be reestablished on this river.

THE TENDER LILY.

Lily.—The tender *Lily* is a wooden, side-wheel steamer of about 507 tons gross burden. This tender made 13 inspection and supply trips; established 56 and discontinued 50 lights; established 106 barrel buoys and discontinued 10 barrel buoys; established 127 diamond board daymarks, and discontinued 26 diamond board daymarks; cut down 8,474 trees over 4 inches in diameter; cut 107 acres of willows and underbrush; issued 12,101 gallons of oil; was employed 172 days; was unemployed for 136 days and 57 Sundays and holidays; steamed some 6,714 miles; was under way about 1,794 hours; consumed about 1,345 short tons of coal; visited 2,167 stations; moved 298 stations, and reset 192 stations. Her main boilers were under steam about 4,968 hours, and her donkey boiler was under steam about 2,216 hours.

Dandelion.—The act approved on March 4, 1907, appropriated $60,000 for a new tender for the use of the Fifteenth light-house district. The plans for building this steamer are under consideration.

SIXTEENTH DISTRICT.

The Sixteenth light-house district extends on the Mississippi River from Cairo, Ill., to New Orleans, La., a distance of 1,054 miles, and on the Red River a distance of 12 miles—in all, a distance of 1,066 miles—and includes all aids to navigation within those limits.

Inspector.—Commander Simon Cook, U. S. Navy.

Engineer.—Capt. William D. Connor, Corps of Engineers, U. S. Army.

There are in this district:

Post lights	441
Daymarks	134
Laborers attending post lights on June 30, 1907	381
Steam tender *Oleander* for supply and inspection	1

POST LIGHTS.

Eighty-five per cent of the post lights are equipped with triangular post lanterns, including 8-inch fresnel globes, furnishing a light visible for a distance of from 3 to 5 miles. Supplemental to the post-lights cross-board daymarks are placed on 134 posts, adding to the visibility of the light-stations in the daytime.

The lighting of the district is as efficient as practicable with the means available. During the year some 33 additional lights were established.

During the year four complete inspection and supply trips were made over the district; 1,592 post lights were visited, inspected, painted, and supplied; 436 post lights were moved and reset; 38 post lights were established; 5 post lights were discontinued; 12 laborers attending post lights were employed; 2,835 trees over 4 inches in diameter were felled, and 75 acres of willows, underbrush, etc., were cleared, and 15,116 gallons of mineral oil and 34¼ gross of wicks were issued.

During the year laborers attending post lights were paid monthly by 5,310 checks from this office.

LIGHT-HOUSE TENDER.

Oleander.—This steel, stern-wheel steamer, of 344 gross tons, was built in 1903 and 1904. During the year she steamed some 9,993 miles and consumed some 1,222 gross tons of bituminous coal. The tender made 4 complete inspection and supply trips; established 38 and discontinued 5 post-lights; cut down 2,835 trees over 4 inches in diameter; cut 75 acres of willows and underbrush; issued 15,116 gallons of mineral oil and 34¼ gross of wicks; was employed 154 days; was unemployed 211 days, and she was under steam some 326 days. She received needed repairs and fitments and supplies.

CONCLUSION.

The Board feels warranted in reporting, in conclusion, that the general efficiency of the service has been maintained throughout the year at as high a standard as was practicable with the means available.

GEO. C. REITER,
Rear-Admiral, U. S. Navy, Chairman.
J. M. HELM,
Commander, U. S. Navy, Naval Secretary.
THOS. L. CASEY,
Lieutenant-Colonel, Corps of Engineers, U. S. Army, Engineer Secretary.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

REPORT

OF THE

COMMISSIONER OF FISHERIES

REPORT

OF THE

COMMISSIONER OF FISHERIES.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF FISHERIES,
Washington, December 1, 1907.

SIR: I have the honor to submit a report of the operations of the Bureau of Fisheries during the fiscal year ended June 30, 1907.

FISH-CULTURAL WORK.

In its general lines the fish-cultural work varies little from year to year, the changes appearing as a rule only in the conditions which attend the taking of eggs and the hatching, and in the quantity of fish produced. The scope of the work is being constantly extended, however, including each year one or two kinds of fish not previously cultivated and adding localities to the field of operations.

OUTPUT.

The total output in 1907 was 2,511,597,377 fish and eggs—nearly 600,000,000 more than for the year 1906, which had the largest previous record. The conspicuous increases were in pike perch, yellow perch, and white perch, blueback salmon, lake cisco, grayling, shad, striped bass, cod, and lobster, with a fair yield of pollock and a comparatively large product of haddock, neither of which were hatched in 1906. On the other hand, the output of whitefish, chinook and silver salmon, and steelhead trout fell below the figures for last year. The number of fish and eggs distributed in 1907 is shown by species in the following table:

SUMMARY OF DISTRIBUTION OF FISH AND EGGS DURING THE FISCAL YEAR 1907.

Species.	Eggs.	Fry.	Fingerlings, yearlings, and adults.	Total.
Catfish			168,426	168,420
Shad	635,000	70,594,150		71,229,156
Whitefish	89,899,000	226,218,000		316,117,000
Lake cisco	9,040,000	50,000,000		59,040,000
Chinook salmon	78,587,705	17,567,092		96,154,797
Silver salmon	160,000	3,636,952		3,796,952
Blueback salmon		58,835,055		58,835,055
Humpback salmon			11,641	11,641
Steelhead trout	150,000	1,235,834	79,218	1,465,052
Rainbow trout	599,500	298,915	2,056,177	2,954,592
Atlantic salmon		2,156,852	39,830	2,196,682

SUMMARY OF DISTRIBUTION OF FISH AND EGGS DURING THE FISCAL YEAR 1907—Continued.

Species.	Eggs.	Fry.	Fingerlings, yearlings, and adults.	Total.
Landlocked salmon	150,000	177,886	249,723	577,609
Blackspotted trout	490,000	5,323,130	1,382,050	7,195,180
Loch Leven trout			67,000	67,000
Lake trout	23,520,000	27,344,532	3,388,600	54,253,132
Brook trout	921,237	5,434,302	3,504,348	9,859,887
Sunapee trout		213,163		213,163
Grayling	200,000	1,814,200		2,014,200
Pike			8,000	8,000
Crappie and strawberry bass		700	25,437	26,137
Rock bass		6,542	30,305	36,847
Warmouth bass			1,812	1,812
Small-mouth black bass		102,600	26,844	129,444
Large-mouth black bass		42,355	463,935	506,290
Sunfish or bream		5,900	56,070	61,970
Pike perch	257,150,000	370,773,000		627,923,000
Yellow perch	10,400,000	257,228,700	14,665	267,643,365
Striped bass	2,000,000	6,737,500		8,737,500
White perch		249,169,000		249,169,000
Cod		235,422,000		235,422,000
Flatfish		178,625,000		178,625,000
Haddock		2,499,000		2,499,000
Pollock		86,299,000		86,299,000
Tautog		450,000		450,000
Lobster		167,909,000	494	167,909,494
Total	473,902,442	2,026,120,360	11,574,575	2,511,597,377

Cod and lobsters.—The work at the marine hatcheries was especially successful, the total output of cod and lobsters being greater than ever before. The Norwegian method of obtaining cod eggs was tested at Woods Hole with such encouraging results that the Bureau is considering the extension of this method to all the marine stations. From various parts of the New England coast is received the gratifying report of an evident increase in the abundance of small lobsters.

Whitefish.—Severe storms which prevailed on Lake Erie during the fall interfered somewhat with the collection of eggs of this species and caused the loss of a considerable number of brood fish, but on the whole the results were satisfactory.

Pike perch.—The output of pike perch is very gratifying. The development of the field at Swanton, Vt., auxiliary to the St. Johnsbury station, supplemented the pike-perch work on the Great Lakes, and was not a small factor in the success of the season.

Yellow perch and white perch.—The propagation of these two fishes is limited in possible extent only by the funds available for the work and the number of stations where the equipment is suitable. The collections of yellow-perch eggs are steadily increasing and the work with this species, as also with the white perch, can profitably be extended to other Atlantic rivers.

Black bass.—The demand for large-mouth and small-mouth black bass continues to exceed the supply. As stated in previous recommendations to Congress, there is a great need for additional pond-culture stations, especially in the Southern States. There was an average output last season.

Shad.—The scarcity of the shad in many of the eastern coastal streams, which has been so often discussed in the Bureau's reports, continues. A fairly successful season obtained on the Potomac and Susquehanna rivers, however, partly from the fact that heavy winds

blew out the pound nets and prevented fishing in the lower parts of Chesapeake Bay, thus permitting the fish to ascend to the spawning grounds in the rivers. At Edenton, N. C., a large proportion of the eggs—nearly 19,000,000—were obtained from gill and pound nets, while the seine fishery at Avoca, usually the main dependence of the Edenton hatchery, furnished but 5,000,000. The protection of the shad in Albemarle Sound has already afforded results, and it is believed that the State law now in force will enable the station to obtain a much larger number of eggs from the gillers in future.

A new field in shad hatching was opened on the Pacific coast, 1,245,000 eggs having been taken in Willamette River. It is reported by the superintendent of the Clackamas station that with proper equipment 10,000,000 shad eggs can be taken there annually. As there is no regular commercial fishery for shad it is necessary for the Bureau to catch the fish from which to take the eggs.

In an effort to inaugurate shad catching in St. Johns River, Florida, the steamer *Fish Hawk* was sent to that locality, but only negative results were obtained, owing to inability to secure ripe fish.

Striped bass.—The three years' operations at Weldon have demonstrated the possibility of propagating striped bass in North Carolina, and the 6,514,000 eggs secured in 1907 yielded 3,680,000 fry. Difficulty is experienced, however, in obtaining ripe fish.

The propagation of striped bass was also taken up, experimentally, on the Pacific coast, under the supervision of the superintendent of the Baird (Cal.) station, in cooperation with the California Fish Commission. Eggs were collected on the San Joaquin River at Bouldin Island, where a temporary building was erected. It is interesting to note that during the first season's efforts 18,705,000 eggs were secured—more than have ever been taken in any one season in North Carolina. With better hatching facilities another season, it is believed that highly satisfactory results can be obtained.

Atlantic salmon.—The number of Atlantic salmon hatched very nearly approached the best previous record. The output is regulated very largely by the number of mature fish that can be purchased from commercial fishermen.

Trouts.—It seems unnecessary to call attention specifically to the results of the work with all the various trouts. The output of brook trout depends to some extent on the amount of money available for the purchase of eggs from commercial fish culturists, this source of supply being more economical than collecting from wild fish. The demand for rainbow trout continues to be so great that, although the stock available for distribution in 1907 was larger than ever before, it was not sufficient to meet all applications. A new station established in California furnished the most satisfactory eggs handled during the season, and is expected to become a valuable source of supply for the hatcheries. Attempts to collect eggs of the golden trout of Volcano Creek, California, were unavailing, the snow and ice on the heights over which it is necessary to pass making it impossible to transport the necessary equipment during the spawning season. Later in the year, however, brood fish were secured and sent to three stations, with a view to artificial propagation.

The hatchery at Northville, Mich., was taxed to its utmost capacity during the past lake trout season, 47,000,000 eggs being laid down

in the troughs at one time. This station supplies practically all the lake trout eggs handled by the Bureau.

Pacific salmons.—The product of blueback salmon was increased this year by the large output of the Yes Lake station in Alaska. This station, which is now practically completed, has fully demonstrated the desirability of its location. With the chinook salmon, the work at several important points was less successful than usual, because of adverse weather conditions. The racks at Baird, Cal., were washed out during the early run of salmon, and almost the entire collection of eggs was lost. At Baker Lake, Washington, more salmon were caught for the retaining pounds than during any preceding season in the history of the station, but an unprecedented rise in the lake released many of the impounded fish, and thus the total number of eggs secured was not large. The work at the field station of Birdsview, which is operated for humpback and silver salmon and steelhead trout, was also much interfered with by freshets.

The abundance of salmon in the Sacramento River is evidenced by the fact that the Mill Creek substation secured over 40,000,000 eggs—its largest take. The work at Mill Creek is as productive as that of any other station on the Pacific coast, and warrants the establishment of a hatchery there.

DISTRIBUTION OF THE OUTPUT.

The marine and anadromous fishes and the output of the hatcheries on the Great Lakes, all commercial species and constituting about 90 per cent of the total output, were as usual planted directly by the Bureau or consigned to State fish commissions. Practically all the other fishes, except those returned to the streams from whose overflow waters they had been taken, were distributed on application, as heretofore, being sent to individuals throughout the country for stocking ponds, lakes, streams, and reservoirs. The applications in 1907 numbered 6,346, which is 540 more than were received in 1906. The number of applications has grown steadily during the past few years.

The distributions in 1907 required travel amounting to 83,840 miles by the Bureau's six cars, and 263,196 miles by detached messengers—a total of 347,036 miles—of which 11,826 for cars and 80,816 for messengers were furnished free of charge. The operation of the new interstate commerce law and the railroad rate laws of various States will seriously increase the cost and difficulty of the Government's distribution of fishes. Where formerly railroads granted free transportation to cars and messengers, or charged but a moderate rate, it has become necessary in some States to pay full fares, and in the detached messenger service to ship the fish by express, while it is an unsettled question whether or not the messengers will be admitted to the express cars to care for the fish. The effect of these laws has already been felt, and indicates that the cost of transportation of fish during the next year will be practically twice what is has been heretofore.

STATIONS.

New stations and improvements.—The hatchery and other buildings at Yes Bay, Alaska, were completed and the station put in full operation in 1907. This makes the number of the Bureau's permanent stations 34, besides which numerous auxiliaries were in operation during the season. Another hatchery in Alaska will be located on a plateau on the east side of Litnik Lake, Afognak Island. A stream emptying into the lake near by will afford an ample water supply, taken from a point above some rapids 10 feet higher than the lake and about 1,200 feet distant. Material and supplies have been purchased and shipped, labor employed, an old cannery near at hand repaired to serve as a temporary storehouse, a sawmill set up, and the cutting of logs for lumber begun. The construction of the hatchery was thus well under way at the close of the fiscal year.

At Craig Brook, Me., the antiquated and unsuitable structure formerly in use has been replaced by a new one-story frame hatchery, 32 feet by 70 feet, with basement and attic. The new building contains suitable storage and workrooms, is heated by steam, and will accommodate 14 double troughs, 13 feet long by 2 feet 8 inches wide, holding 1,600 trays, with a capacity for 10,000,000 brook-trout eggs.

A new salmon hatchery has also been constructed at Battle Creek, Cal. The building is of wood and is 142 feet long by 58 feet wide, and contains 192 troughs 15 feet long. The water power at this station has been increased by raising the dam at the head of the supply ditch.

The former steam plant at the Baird (Cal.) salmon station having become obsolete and worn out, electricity has been installed and all buildings have been equipped with electric lights. Arc lights at the seining grounds permit advantageous night work and with electrical power the pumps can be operated with a considerable saving of labor and money.

At Manchester, Iowa, the capacity of the station has been increased and improved by the construction of a large breeding pond, 200 feet by 130 feet, and by relining the nursery-stock ponds with cement.

A nine-room frame house has been built for the superintendent at Put-in Bay, Ohio.

At Tupelo, Miss., a steam pumping plant has been installed, and the wells which furnish the water supply have been deepened and enlarged.

A steam boat 61 feet long, especially equipped for the purpose, has been purchased for use in connection with lobster propagation on the Maine coast.

Personnel.—The successful results and large output of the stations in recent years bring added credit to the superintendents and employees responsible for the collection of eggs upon consideration of the difficulty of keeping skilled men in the service. The same class of employment in commercial life brings a remuneration one and a half to five times as great. With such competition the Bureau is handicapped by the inability to secure competent men or, securing them, to retain them.

BIOLOGICAL INQUIRIES.

The study of the habits, migrations, spawning, diseases, etc., of the aquatic animals sought by man, and the almost equally important study of the creatures that serve as food or act as enemies to those of economic value, is conducted from year to year as a fundamental branch of the work in behalf of the fisheries. It was continued in 1907 upon the usual lines, in several cases being supplemented by direct experiment with immediate commercial application.

OYSTER EXPERIMENTS.

Lynnhaven Bay, Virginia.—In the Bureau's experiments at Lynnhaven for the development of a commercial process for fattening oysters artificially, the only important problem yet awaiting solution is that of materially increasing the output of the plant. Considerable progress toward this end has been made during the past year, the yield of the claire in 1907 being 176 barrels, against 125 barrels in the preceding year; and, as with a given equipment the expenses of operation are not materially increased whatever the product, this increase, if it can be carried further, as present conditions indicate, will result in sufficient margin between the cost of the treatment and the increased value of the fattened oysters to warrant its recommendation as a commercial process. The oysters fattened by this method are as fine as any placed on the market, and they have been used with satisfaction at some of the best hotels and clubs of New York, Philadelphia, and Washington.

Louisiana.—The experiments undertaken at the request of the Louisiana Shellfish Commission have been continued. The plantations established during the preceding fiscal year have all been successful, with the exception of one which was selected for the purpose of determining what could be done with certain apparently hopeless adverse conditions. In Barataria Bay, where there has been heretofore no oyster fishery whatever, the experiments have been so successful during the first year as to result in the establishment of a considerable industry, which already yields to the State of Louisiana in rentals alone an annual income about equal to the total expenditure of this Bureau in the entire State. The experiments in other localities are almost equally successful, but have not yet attracted the same attention. At the conclusion of the work a report will be presented covering not only matter of immediate importance to Louisiana, but the results of investigations having general application to the oyster industries of the country at large.

Maryland.—In accordance with an act of Congress and at the request of the governor of Maryland, the Bureau has rendered assistance to the Maryland Shellfish Commission in a survey of the oyster beds of that State, detailing an assistant to act in an advisory capacity, and lending a launch and crew and various instruments. The work, which is being done in cooperation with the Coast and Geodetic Survey, is the most complete of the kind and is a necessary preliminary to the restoration of Maryland to her former position as the first oyster-producing State.

SPONGE EXPERIMENTS.

The series of disasters which for several years have pursued these experiments culminated in the almost total destruction of the plantation at Cape Florida by the great hurricane of October, 1906. Notwithstanding the difficulties with which this work has been beset, however, satisfactory progress has been made during the past year, and it is believed that by the end of next June a report can be issued recommending a commercial system of sponge culture. In view of the more rapid depletion of the natural beds, which will undoubtedly result from recent changes in the methods of the fishery, the Bureau is convinced that the preservation of the American sponge industry will depend upon cultivation, and the speedy conclusion of these experiments will be a source of satisfaction. It is estimated that about $1,500,000 worth of sponges were taken in Florida during the past year, and the failure of the fishery, therefore, would be the ruin of one of the important industries of the State.

TERRAPIN EXPERIMENTS.

The experiments to develop a system of terrapin culture, conducted on the Choptank River in Maryland, have been continued. During the past year a considerable number of eggs were laid and hatched, and the habits and growth of both young and adults were closely studied. There appears to be little difficulty in inducing the diamondback terrapin to breed in captivity, but the rate of growth is so slow as to make it uncertain whether artificial culture can be made a commercial success. The work will be continued until definite results are attained.

MARINE BIOLOGICAL LABORATORIES.

The two marine laboratories of the Bureau, at Woods Hole, Mass., and Beaufort, N. C., were engaged as usual in studies of the adjacent waters. At Woods Hole the biological survey was continued by supplemental dredgings to verify doubtful results and to supply specimens for a study of the materials of the sea floor in their relation to the distribution of plants and animals, and by systematic shore collections to develop the distribution of the plants and animals of the littoral. Sufficient material has now been gathered to furnish approximately complete and accurate data for a comprehensive report on the flora and fauna of the region, and considerable progress has been made in identifying the collections and digesting the results. The reference museum of the local fauna has been improved until it now contains a fairly representative set of specimens authoritatively identified by specialists.

Thirty-two investigators availed themselves of the facilities of the laboratory. Their work was of varied character, embracing some investigations of great importance to the fisheries, chief of which was the continuation of an inquiry into the food value of certain hitherto unused marine animals. It is believed that species such as the dogfish, not only of little present value but often a menace to the other fisheries, may be made an important source of income to the fishermen.

At Beaufort considerable progress was made in the study of the local fauna and its relations to the fisheries. A number of investigators were accommodated at the laboratory. The habits of fishes and other marine animals were studied, and experiments in the artificial raising of sponges and in clam and oyster culture were carried on in continuation of the work of the preceding year. The seaweeds of the vicinity of Beaufort were studied, also, in the hope that, as the algæ of Japan support a profitable industry, it may be possible to develop the corresponding resources of the United States.

EXPLORATIONS AND SURVEYS.

North Pacific and Japan.—At the beginning of the fiscal year the *Albatross*, which had been dispatched in May on a cruise to investigate the salmon fisheries and the distribution of fishes in the north Pacific, had reached Hakodate, Japan, and from that time until she returned to San Francisco Bay she was steadily employed in that work. The results accomplished were of high scientific importance and the voyage was prosperous in every respect until the night of November 21, when, homeward bound, the commanding officer, Lieut. Commander L. M. Garrett, U. S. Navy, was lost overboard. Captain Garrett took command of the vessel on October 3, 1904. He had previously served as executive officer, and his familiarity with the ship and her work rendered him a valuable officer. His untimely death under such peculiarly distressing circumstances was a source of profound regret to the Bureau.

Sebago Lake, Maine.—During the summer and fall of 1906, in continuation of the general plan for the biological and physical study of the principal fresh waters of New England, a party carried on investigations in Sebago Lake. Many artificially hatched salmon and trout have been planted in this lake and contiguous waters, and the locality affords a good field for the investigation of the effects of fish culture in modifying the fauna. The habits of the local Salmonidæ, their food, breeding, and environment, were the subject of particular study.

Lake Maxinkuckee, Indiana.—The investigations which have been conducted at Lake Maxinkuckee at intervals for a number of years past were continued from July to November of the present fiscal year. The food, parasites, and diseases of fishes and the habits of the fresh-water mussels received special attention. The mussel investigations are of particular importance in view of the depletion of the natural beds of the Mississippi Valley under the demands of the pearl-button industry. This industry is now yielding an annual product worth about $5,000,000.

COMMERCIAL AND STATISTICAL INQUIRIES.

The commercial fisheries of the United States, exclusive of its insular possessions, at the present time represent an investment of nearly $90,000,000, which yields an annual income of nearly $60,000,000. The general condition of the industry is good and the trend is upward, although a few important branches are in a state of established or impending decline. The mackerel fishery was exceptionally poor in 1906, owing to a continued scarcity of fish, but the outlook for 1907, as shown by the spring catch, was remarkably

favorable. The yield of halibut was smaller, but the catch of cod, haddock, and other ground fishes was large. While the catch of lobsters was less than formerly, there have been local evidences of a greater abundance which are by many people regarded as a forerunner of general improvement. The Pacific cod and halibut fisheries showed a slight decline, but the salmon fishing and canning industry exhibited some increase. The shad fishery on the Atlantic rivers in the spring of 1907 was more productive than in the previous year, owing to a greater abundance of fish, but the conditions are quite unsatisfactory. The capture of increasing quantities of mature shad on their way to the spawning grounds demands concerted movement of the various States for protective legislation. In the most important of all our fisheries, the oyster, there is to be noted a healthy condition, owing to growing dependence on cultivation.

NOTES ON IMPORTANT FISHERIES.

Boston and Gloucester.—A good criterion of the extensive New England vessel fisheries is afforded in the trade centering at the two great markets of Boston and Gloucester, where an aggregate of 170,401,210 pounds of fish, having a value of $4,072,362, was landed by American vessels in 1906. Of this immense quantity 129,230,658 pounds, worth $2,808,228, were secured on grounds lying west of the sixty-sixth degree of west longitude—that is, directly off the New England coast.

Mackerel.—The total catch of salted mackerel in 1906 was approximately 10,448 barrels, valued at $171,970, which includes 4,376 barrels taken on the Cape shore and in the Gulf of St. Lawrence. This quantity falls short of the 1905 catch by 18,853 barrels. The catch of fresh mackerel was 35,240 barrels, representing a value of $423,000. This quantity was 14,672 barrels less than was taken in the previous year.

The condition of the mackerel fishery is viewed with considerable alarm. The methods involve great expense, and the baffling movements of the fish for the last few years, with consequent poor catches, have caused heavy losses. The scarcity is widespread, according to the annual report of the Boston Fish Bureau, which states that the world's catch of salted mackerel in 1906 was but 99,137 barrels, divided among various countries as follows: United States, 10,138 barrels; Canada, 30,000 barrels; Ireland, 30,000 barrels; Norway, 28,999 barrels. The total catch of these countries in 1905 was 185,094 barrels, or 85,957 barrels more than in 1906.

Cod.—In 1906 there were landed at Boston and Gloucester 36,195,616 pounds of fresh and 18,323,093 pounds of salted cod, an increase of 529,156 pounds over the total quantity landed in the previous year. Of the 1906 catch 39,090,106 pounds were taken on banks west of the sixty-sixth meridian.

The catch on the Pacific coast shows a slight decrease compared with the previous year. The total number of fish landed at San Francisco and Puget Sound ports was 3,527,118, of which 2,407,500 were landed at the more southern points and 1,119,618 in the northern region. This catch represents 14,108,472 pounds, a decrease of 459,528 pounds, or 114,882 fish, the average weight of the fish being reckoned at 4 pounds.

Herring.—The American fleet engaged in the herring fishery in Newfoundland waters in 1906 consisted of 62 vessels, in addition to which 4 Canadian vessels were chartered by American fishermen. There were also engaged in the fishery 27 Canadian and 55 Newfoundland vessels, the latter mostly small craft. American vessels employed, in addition to their regular crews, 780 native fishermen shipped outside the three-mile limit. The fishery was prosecuted in practically the same manner as in the previous year, with the exception that a few purse seines were used early in the season. Although the weather was unusually severe, the catch was large, that of the American fleet amounting to 72,309 barrels of frozen and salted herring, valued at approximately $392,340. Six American vessels were lost.

Haddock.—This fishery has shown marked development in the last few years, employing larger and improved vessels, and yielding a larger catch. In 1906 the quantity taken amounted to 47,724,050 pounds landed at Boston and 13,871,787 at Gloucester, a total of 61,596,837 pounds, valued at $1,136,426. Since the beginning of 1907, however, the supply of fresh haddock has at times exceeded the demand, and many trips were split and salted.

Pollock.—The supply of pollock in the Boston and Gloucester markets in 1906 fell short of the 1905 yield by 12,000,000 pounds, being 9,510,262 pounds, valued at $115,173, against 22,055,789 pounds, valued at $216,534. Notwithstanding this large decrease, however, the fishery as a whole is growing in importance. Pollock have been unusually plentiful, and many large catches have been made in a very short time. The fish are taken at all seasons, but the principal fleet, composed mostly of small craft, is occupied in the fall.

Hake and cusk.—These fish, although not so erratic as pollock, are much more abundant some years than others. In 1905 there were marketed at Boston and Gloucester 32,265,471 pounds of hake and cusk, against which 1906 afforded only 18,617,957 pounds, a decrease of 13,647,514 pounds. Considering the last few years, however, the fishery has shown a gratifying increase.

Flounders.—The flounder fishery on both the Atlantic and Pacific coasts is increasing in importance. The catch landed at New England ports, of which Boston is the principal market, is about 5,500,000 pounds annually, with a value of $150,000. The Middle Atlantic States produce a little over 3,000,000 pounds, worth $114,000, and the South Atlantic and Gulf States 400,000 pounds, worth $10,000. This is a total of 9,300,000 pounds for the Atlantic coast, while the Pacific States produced 4,550,000 pounds. The flounder catch of both coasts has a value of approximately $360,000.

Swordfish.—The increasing demand for swordfish in the last ten years has directed considerable attention to this fishery. The catch in 1906 was 3,296,369 pounds, valued at $204,637, which is about twice the quantity and value of the catch two years previous.

Halibut.—On the Atlantic coast in the last ten years this important fishery has greatly declined. The catch in 1906, however, was considerably in excess of that of 1905, being 4,654,446 pounds, against 3,715,776, a gain of 938,670 pounds and $78,436. The quantity of halibut landed at Gloucester in 1906 exceeds that landed at Boston the same year by 3,509,946 pounds and $232,468 in value. Of the total

quantity, 635,881 pounds was salted, all of it marketed at Gloucester. The increase in the catch is attributed to the fact that the banks have not for a number of years been so extensively fished as formerly, the fleet at the same time having decreased about two-thirds. The halibut has thus had time to reestablish itself. Up to the close of the fiscal year 1907 the catch on the Atlantic coast approximated that for the corresponding period of 1906.

The large catches on the Pacific halibut grounds for the past fifteen years have brought a considerable number of steam and sailing vessels into this fishery, and the grounds have been very thoroughly fished. A consequent scarcity of fish is said to have existed on some important grounds in 1906, but the increased yield of the Atlantic banks lessened the demand for Pacific halibut, and thus limited the catch for that year. The quantity taken is estimated to have amounted to about 11,000,000 pounds, however, which is 6,000,000 pounds more than the catch on the Atlantic coast.

Alaska salmon.—The new laws governing the fisheries of Alaska did not become operative until so late in the fishing season of 1906 that they were without effect during that year, and the annual inspection revealed practically unchanged conditions, though the several branches showed fluctuations in output. The pack of canned salmon was unusually large—the best since 1903—and the goods brought remunerative prices, making the season a prosperous one. The agitation concerning the meat-packing plants in Chicago led to some distrust in European markets of American canned salmon, but the exceptional care and cleanliness which prevails in the salmon-packing establishments served to dispel the prejudice, and the demand in foreign markets soon became normal. The earthquake and fire in San Francisco also affected the salmon industry, through the destruction of vessels and the dispersal of cannery employees. The number of canneries operated, however, was nevertheless greater than in the previous year, being 47, against 42 in 1905. The total pack of all kinds of salmon was 2,246,989 cases, valued at $7,896,392.

The pickling of salmon, the oldest branch of the salmon industry, is declining, the mild-cured product now being more in demand. The salteries in 1906 yielded an output of 16,926 barrels and 3,389 half barrels, worth $139,838. Ten firms and individuals engaged in mild curing, putting up 1,294,900 pounds of salmon, worth $67,007, in their initial season.

Four hatcheries were operated in Alaska in 1906, three by different firms, and one by the Bureau of Fisheries. The first season for the latter (1905–6) resulted in an output of 6,638,550 sockeye fry. The output of all the hatcheries that season amounted to 104,817,962 sockeye and 1,837,000 coho fry. In the fall of 1906 the hatcheries contained 205,909,200 sockeye, 30,000 coho, and 182,000 steelhead eggs, of which 58,210,000 of the sockeyes and all the steelhead trout were in the Government hatchery at Yes Lake.

As a result of the inspection of 1906 several recommendations have been submitted, viz, that Eyak River and Lake, on Prince William Sound, be declared a salmon-spawning reservation, to permit the reenforcement of adjacent waters; that the salting of salmon bellies by processes that do not make use of any other part of the fish be prohibited; that Indians be prohibited from taking salmon with gaff

hooks in the Chilkoot and Chilkat rivers for sale to the canneries; and that Wood River be closed to commercial fishing and a salmon hatchery be established on the chain of lakes at its head.

ADMINISTRATION.

MOVEMENTS OF VESSELS.

The *Albatross* completed the explorations in the Northern Pacific Ocean and Japanese Archipelago the latter part of October and sailed for home from Yokohama November 10, 1906, arriving in San Francisco December 10. The wear and tear of the long cruise just completed and the operations of the previous year necessitated an extensive overhauling of hull, machinery, and rigging before another extended expedition could be undertaken, and accordingly arrangements were made with the Navy Department to have the vessel put in cruising condition at the Mare Island Navy-Yard. The work was begun February 18, 1907, and at the close of the year was nearly finished.

The steamer *Fish Hawk* continued the experimental shad work on the Kennebec River until the end of the season, then during the remainder of the summer of 1906 was utilized in biological survey of Buzzards Bay. In the fall she was sent to Florida waters to assist the efforts toward the propagation of mullet and later of shad in the St. Johns River. At the close of the year she was in Hampton Roads in connection with the exhibit of the Bureau at the Jamestown Exposition.

The schooner *Grampus* was engaged in the collection of egg-bearing lobsters for the Maine hatchery and the planting of young lobsters along the Maine coast till the latter part of September. She was then dismantled at Gloucester, Mass., in anticipation of the extensive repairs provided for by act of Congress, and her crew was detailed to assist in the work of the Gloucester station. A bid for the repairs having been accepted from a firm in Boothbay Harbor, Me., the vessel was dispatched to that point in June, 1907.

JAMESTOWN EXPOSITION.

In the act of Congress directing the participation of certain Government departments and bureaus in the Jamestown Ter-Centennial Exposition near Norfolk, Va., the Bureau of Fisheries was specifically mentioned and provision was made for a fisheries building, including an aquarium. Preparations were begun in September under the direction of the representative on the Government board for the Department of Commerce and Labor, and the first shipment of material was made the latter part of January. The exhibit was in place and ready on the opening day, April 26, but owing to lack of electrical power and an adequate supply of fresh water, both of which important factors were to have been furnished from outside sources, it was necessary to postpone opening the aquarium for one week.

The building provided is connected with Government building "A" by a colonnade and contains 6,200 square feet of space, of which 2,650 square feet are occupied by the aquaria and entrances. The aqua-

rium consists of 19 tanks arranged about the sides of the building and a central pool for seals, turtles, and other large animals. Owing to the desirability of giving particular attention to an exhibit of marine life, but small space was left available for illustration of the functions of the Bureau by a fixed exhibit, and only a select number of models, apparatus, etc., pertaining to the more salient or interesting phases of the work, could be displayed.

PUBLICATIONS AND LIBRARY.

The Bureau's publications in 1907 amounted to 1,077 pages and included 15 pamphlet articles. The Bulletin was carried into its twenty-sixth volume. The number of pamphlets supplied to addresses on the regular mailing list was 6,405, in response to requests 14,290 were sent out, and the authors of the respective papers received 531, the total distribution being 21,226.

Accessions to the library numbered 325 bound volumes and 638 unbound books and pamphlets. Purchases have as usual been restricted to books of reference and those bearing directly on the work of the Bureau.

INTERNATIONAL RELATIONS.

At the request of the Department of State an assistant of the Bureau was dispatched to Newfoundland, as in the previous year, to note the progress and condition of the American herring fishery on the so-called " treaty shore " and to keep the Government informed regarding the developments under the modus vivendi. The naval tug *Potomac* was placed at the disposal of the Bureau's representative, and remained on the grounds during the entire season, which lasted from the latter part of September to the middle of January. No special complications over the fishery question arose.

A number of requests for fish eggs were received through diplomatic channels, and 3,797,500 were thus donated to foreign governments. This number comprised 87,500 rainbow trout eggs destined for the private preserves of the Emperor of Japan at Nikko; 10,000 steelhead trout eggs for the national fish hatchery at Nancy-Bellefontaine, France; and 2,000,000 whitefish, 1,000,000 lake cisco, and 500,000 chinook salmon eggs for New Zealand. The success attending the introduction of rainbow trout and other American fishes into New Zealand is well known, and it is a matter of great economic and scientific interest that runs of blueback, or sockeye, and chinook salmon have recently been established in rivers of that colony.

APPROPRIATIONS.

The appropriations for the Bureau for the fiscal year 1907, were as follows:

Salaries	$276,820
Agents at Alaska salmon fisheries	4,500
Miscellaneous expenses:	
Administration	12,500
Propagation of food fishes	250,000
Inquiry respecting food fishes	25,000
Statistical inquiry	7,500
Maintenance of vessels	55,000

Purchase of additional land, improvements, and completion of stations at—	
Wytheville, Va	$5,000
Cold Springs, Ga	2,000
Erwin, Tenn	50
For construction and repair of buildings and improvements of water supply at—	
Manchester, Iowa	7,000
Baird, Cal	10,000
For care of fish ponds, Monument Lot	300
For repairs to schooner *Grampus*	7,500
For purchase of steam launches at—	
Yes Bay, Alaska	8,000
Boothbay Harbor, Me	5,000

In accordance with law the expenditures under these several appropriations will be made the subject of a special report.

RECOMMENDATION.

NEW BUILDING AND PUBLIC AQUARIUM.

Attention is again directed to the inadequate and obsolete quarters occupied by the Bureau of Fisheries in Washington, with emphasis upon the necessity for a new office building containing special laboratory facilities that are now lacking. Much of the work of the Bureau in the interests of the fisheries and fish culture requires for its successful accomplishment fresh and salt water tanks in which experimental investigations may be conducted. The absence of such tanks at headquarters has greatly retarded progress and in some cases has necessitated the indefinite postponement of important inquiries.

In conjunction with the desired new office building there should be maintained a modern aquarium, which would be a place of great public interest and educational value and at the same time of practical utility to the Bureau. The facilities already possessed by the Bureau for stocking and operating such an aquarium would permit its maintenance at a trifling cost. Attention is called to references to a national aquarium in the report of the Secretary of Commerce and Labor for 1903.

Respectfully,

GEO. M. BOWERS,
Commissioner.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

REPORT

OF THE

SUPERINTENDENT, COAST AND GEODETIC SURVEY

REPORT

OF THE

SUPERINTENDENT, COAST AND GEODETIC SURVEY.

DEPARTMENT OF COMMERCE AND LABOR,
COAST AND GEODETIC SURVEY,
Washington, July 13, 1907.

SIR: At the beginning of this calendar year the Coast and Geodetic Survey completed the centenary of its existence.

The wise prevision of Jefferson caused him to recommend to Congress that a detailed survey of the coasts be undertaken in the interests of commerce and defense, and Congress accordingly passed the act creating the Coast Survey in 1807.

The most distinguished scientific men of the time were called upon to devise or sanction the principles on which the work was to be carried out; and the operations of the bureau thus planned have shed luster on the American name.

The Coast and Geodetic Survey is one of the bureaus of this Department devoted primarily to safeguarding life and property at sea, and since whatever diminishes the cost and hazards of commerce concerns everyone, whether living on the coast or in the interior, the work of this Bureau has received the encouragement of Congress, which has extended the field of its duties to keep pace with the acquisition of territory and the extension of the jurisdiction of the United States.

Commerce is directly affected by its hydrographic and magnetic surveys, and its tidal predictions.

The result of its geodetic operations is to furnish by its trigonometric survey the framework or backbone connecting and correlating all the topographic surveys of the country and incidentally to furnish data for the admeasurement of the earth. In the latter task all the civilized nations are cooperating because its accomplishment is beyond the power of any single one.

The following statement summarizes the work of the Coast and Geodetic Survey for the fiscal year ending June 30, 1907:

FIELD WORK.

An interesting feature of the work of the year is the investigation of the effect of the San Francisco earthquake of April, 1906, on the triangulation covering the region in the vicinity of the great " fault,"

which shows on the surface of the earth from Point Arena to Monterey Bay, a distance of more than 320 kilometers (200 miles). Fortunately this region had been covered by triangulation of a high degree of precision in the progress of the work intrusted by law to the Coast and Geodetic Survey, and there are numerous points within the region whose coordinates were determined by this triangulation. There was reason to believe that the relative positions of many of these points were changed by a measurable amount, and it was decided to repeat as much of the triangulation as was necessary to determine what changes had occurred. Astronomical azimuths were determined, many of the triangulation stations were reoccupied, and the horizontal angles were remeasured in order to compute new geographic positions of points within the region. The direct comparison of the coordinates obtained in the old and in the new work shows the movement of any point selected in latitude, in longitude, and in azimuth referred to adjacent points.

The work extends from the region of no disturbance on the east, southward to Monterey Bay and northward to Point Arena. The investigation has been nearly completed and the amount of displacement determined agrees in a general way with the measurements made on the ground by the California Earthquake Commission at certain places on roads and along fences where such measurements were possible. One of the International Observatories for the determination of latitude is located at Ukiah, 30 miles east of Point Arena, and the observations there show that at this point there was no movement in latitude, or that it was too small to be measured.

Leveling operations were also undertaken and completed in the vicinity of San Francisco to ascertain whether any movement affecting the Survey bench marks could be detected as a result of the earthquake. Additional details concerning this work will be found in my annual report to Congress.

The triangulation along the ninety-eighth meridian was extended in Minnesota from the vicinity of Fergus Falls to the Stephen base. One base line was measured in Minnesota in connection with this triangulation. The primary triangulation along the Pacific coast in Oregon and Washington was completed, and the necessary connections of the tertiary triangulation along the coast with the primary work in the interior were undertaken and two such connections were made. The triangulation of the city of New York by the corporation, under the direction of the Coast and Geodetic Survey, made satisfactory progress.

Astronomic observations to determine latitude, longitude, or azimuth were made in Alabama, Florida, Georgia, Kansas, Minnesota, Nebraska, North Carolina, North Dakota, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, and Virginia.

The standard levels were extended in California, Idaho, Montana, Nevada, Ohio, and Utah.

Hydrographic examinations were made to safeguard navigation in localities where they were necessary along the coasts of Maine, Massachusetts, Rhode Island, and New York. East Penobscot Bay, Eggemoggin Reach, and Jericho Bay, on the coast of Maine, and certain channels in the vicinity of Key West, Fla., were examined with the long wire drag. This drag, which is described in my annual report for 1905, has proved to be an important advance in the

work of safeguarding vessels, as it detects all dangers to navigation above the depth at which the drag is used. Hydrographic work was done on the inside of the entrance to Chesapeake Bay and along the Virginia shore, between New Point light and Back River light, off the entrance to York River. The offshore hydrographic work was continued and practically completed to the eastward of Vieques Island, Porto Rico, and in that vicinity, and the offshore hydrography off the north coast of the island of Porto Rico was extended westward from Cape San Juan.

The topographic resurvey of the shores of the Potomac River was completed, topographic work was continued along the shores of Chesapeake Bay, and a survey was made of Fisherman Island Quarantine Station as requested by the United States Public Health and Marine-Hospital Service.

The magnetic survey of the country was continued by making observations in Alabama, Alaska, California, Colorado, Connecticut, District of Columbia, Florida, Idaho, Indian Territory, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Philippine Islands, Porto Rico, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wyoming. Continuous observations were obtained at magnetic observatories maintained at Cheltenham, Md.; Baldwin, Kans.; Sitka, Alaska; Honolulu, Hawaii, and Vieques, Porto Rico. Magnetic observations were made at sea in the Atlantic and Pacific oceans on board the vessels of the Survey on their voyages to and from their field of work, and on a voyage of one vessel from Norfolk to Seattle via the Straits of Magellan.

TIDE OBSERVATIONS.

Self-registering tide gauges were maintained at the following stations: Fort Hamilton, N. Y.; Philadelphia, Pa.; Baltimore, Md.; Fernandina, Fla.; Weeks, La.; Galveston, Tex.; San Diego, Cal.; Presidio, Cal.; Seattle, Wash.; Honolulu, Hawaii; and Manila, and Iloilo, P. I.

The tide indicators at Fort Hamilton, New York; Reedy Island, Delaware River, Delaware, and Alcatraz Island, San Francisco, California, have been continued, and the electric tide indicators in the rooms of the Maritime Association of New York and in the Bourse Building in Philadelphia have given satisfaction.

The information necessary for the revision of the United States Coast Pilot, Part VI, was collected in the field, and similar work for the revision of Part VIII is in progress.

ALASKA.

Surveys were made of the entrance to Cooks Inlet and connected with the work at Resurrection Bay; of Khaz Bay and Slocum Arm and extended to Salisbury Sound; off Ketchikan; of Latouche Passage, in Prince William Sound; off Kodiak; of St. Paul Harbor; of Anchorage Bay (a branch of Chignek Bay); and progress was made in the survey of Alitak Bay and Sitkinak Strait.

PHILIPPINE ISLANDS.

On the west coast of Luzon the offshore hydrography was completed from Balingasay Point to Caiman Point and from Guai Point to Capones Islands. The survey of the west coast of Luzon was completed between Talin Point and Cape Santiago. Triangulation work was done between Luzon, Mindoro, and Marinduque, and the triangulation of central Luzon was extended from Dagupan to Caballo Island at the entrance to Manila Bay. Hydrographic surveys were made in Verde Island passage.

The survey of the east coast of Luzon, west of San Miguel Bay to Jesus Point, was made and connected with Calaguas Islands. A survey was also made from Alabat Island to the west coast of Polillo Island. A harbor of refuge (in typhoons) was discovered in the Lamit Islands, which will greatly increase the safety of vessels on this dangerous coast.

A dangerous shoal off Cabugao, Catanduanes Islands, was located and its limits determined.

A survey was made of the north coast of Samar from Laoangto to the Balicuatro Islands. The survey in Matarinao Bay, Samar, was completed and the surveys of all harbors suitable for commerce or refuge on the north and east coast of Samar were perfected. The survey in Guimaras Strait was continued, and work was done on the east coast of Panay and the north coast of Negros.

Hydrographic work was done off the south and west coasts of Panay from Oton to San Jose de Buenavista. The triangulation was extended all along the west coast of Panay and the topographic work was completed to Bugan River.

On the west coast of Leyte the topographic work was extended south of Hindang and the Comote and Quatro Islands were surveyed. The hydrographic work was completed from Danajon Banks to Palompon. The survey of Iligan Bay, north coast of Mindanao, was continued. The survey of Sibuguey Bay on the south coast was begun, and the survey of the Gulf of Davao was continued.

Tide observations were made in connection with all hydrographic work and continuous observations were obtained at Manila and at Iloilo. As much as possible of the work of preparing the results for the use of mariners and others is done at the suboffice at Manila in order to aid in its prompt publication by chart or otherwise. Twenty-two drawings for charts were prepared and forwarded to Washington for printing. Eight of these were for new charts, nine were drawings for new editions, and five were drawings with extensive corrections. Eleven Notices to Mariners and a new edition of section III of the Sailing Directions were prepared and published.

The arrangement under which the insular government pays a portion of the expenses of the survey work in the islands was continued during the year.

INTERNATIONAL BOUNDARY WORK.

Certain portions of the work involved in opening and remonumenting the boundary line between the United States and Canada along the forty-ninth parallel west of the Rocky Mountains had been completed and others were being continued at the date of my last annual

report. The final inspection of the completed portion of the line and the placing of numbers on the monuments is in progress under the joint direction of the commissioners.

The examination of the international boundary between the United States and Canada, along the northern border of Vermont, was completed, and the work of opening and remonumenting the line is in progress under the joint direction of commissioners representing the United States and Great Britain. About half of this work was completed during the year.

Satisfactory progress was made in the demarcation of the Alaska-Canada boundary in southeastern Alaska and the work of locating the line, opening the vista along the line, and of erecting monuments was being continued at the date of this report. A point on the one hundred and forty-first meridian of west longitude was ascertained, on the Alaska boundary near the Yukon River, as provided in the convention between the United States and Great Britain (dated August 16, 1906) by the commissioners representing the two governments, and the work of tracing and marking this boundary is in progress under the joint direction of the commissioners.

SPECIAL WORK.

The fifteenth General Conference of the International Geodetic Association was held at Budapest, Hungary, September 20 to 28, 1906. The Superintendent and another officer of the Coast and Geodetic Survey attended its sessions as delegates representing the United States. The convention under which this international association exists was formally renewed for a period of ten years and other business of importance was transacted.

Work at the latitude observatories at Gaithersburg, Md., and at Ukiah, Cal., maintained by the International Geodetic Association under my direction, was continued during the year.

An investigation of the figure of the earth, based on existing geodetic work in the United States, was completed and a report on the subject was presented to the International Geodetic Association by the delegates from the United States to the fifteenth general conference at Budapest, Hungary, in September, 1906.

An officer of the Survey continued on duty as a member of the Mississippi River Commission, as required by law, and devoted as much of his time as necessary to the work of the commission. This officer has been appointed by the Secretary of War as a member of the board to examine and report on a 14-foot channel in the Mississippi River from St. Louis to the mouth.

As provided by law, an officer of the Survey was detailed to cooperate with the Maryland State Board of Shell Fish Commissioners in making a survey of and locating the natural oyster beds, bars, and rocks in the waters within the State of Maryland. During the year the work of the Coast and Geodetic Survey representatives was completed in the waters of Anne Arundel County, and a report and maps were prepared and published. The work is being continued in other waters of the State.

In response to a request from the Naval Board, Jamestown Exposition, several special surveys and hydrographic examinations were made in Hampton Roads and vicinity, and a special anchorage chart

was prepared and published showing the anchorage selected for the vessels of the United States and foreign navies visiting the exposition.

OFFICE WORK.

In the office the current work was kept up to date and satisfactory progress was made in the various branches of the work, including computation, plotting, and discussion of results of field work and the preparation of the data for publication by chart or otherwise. Constant proof of the usefulness of the work of the Bureau is afforded by the continued increase in the number of requests for data from the archives of the Survey. All such data, suitable for publication, are being prepared as rapidly as possible for distribution in printed form.

The computation of heights from the leveling observations and the reduction of astronomic observations were made as the records were received, and this work is practically up to date.

The computations necessary to reduce the measurement of base line made during this and the preceding fiscal year were completed and the results of this work will be published as a part of my annual report to Congress.

The results of magnetic observations made on land and at sea during the year have been revised and prepared for publication in my annual report. Good progress has been made in the reduction of the records of the magnetic observatories, in the endeavor to prepare for early publication the results for the three years 1902–1904. The reduction of the vertical intensity observations made at Cheltenham during certain specified hours in 1902–3 was finished and the results have been transmitted to the German Government, thus completing the data called for in cooperation with the German Antarctic Expedition of 1902–3. In response to requests from magneticians abroad, data have been furnished from time to time to be used in special investigations of terrestrial magnetism and allied phenomena. The compilation of earthquake data obtained from the seismographs at Honolulu, Cheltenham, and Vieques has been completed to the end of 1906. New tables, showing the secular change of the magnetic declination, and a new isogonic chart of the United States, for 1905, were prepared and published as Appendix No. 4 of my report for 1906. A revision of this chart, based on the observations made by this Bureau and the Department of Terrestrial Magnetism of the Carnegie Institution during the past fiscal year, has been completed, and progress has been made in the preparation of isoclinic and isodynamic charts for January 1, 1905.

Tide tables containing the predicted tides for numerous ports on the coasts of the United States and of foreign countries for the year 1908 were prepared for publication. Copies of the predicted tides for Astoria, Oreg., and Sitka, Alaska, were furnished in advance of publication to the Canadian government, in response to a request from the authorities, and similar information relative to Wellington and Auckland, New Zealand, was furnished to the New Zealand authorities upon request.

Twenty drawings for charts were completed for reproduction by photolithography, nineteen of these being for new charts.

Corrections to be made on 434 charts were prepared for the engravers, on the original drawings or on the office standards, and several miscellaneous drawings, including a large wall map for the use of Congress, were made.

Five new copper plates were engraved, 9 were etched, 71 were extensively corrected, and minor corrections were made on 855.

One hundred and twenty-four thousand two hundred and sixty-three charts were printed for sale and distribution.

The annual report of the Superintendent to Congress for 1906 was prepared and sent to the printer on September 1, 1906, and was available for distribution on December 1, 1906.

The amount appropriated for the Coast and Geodetic Survey for the fiscal year 1907 (June 30, 1906) was $848,915, of which $210,245 was for manning and equipping the vessels of the Survey, $30,000 for repairs and maintenance of vessels, and $50,000 for office expenses. The remainder of the appropriation was divided between expenses of parties in the field ($257,900) and salaries of field and office forces ($300,770). In addition to the above sums, the appropriations for marking the United States and Canada boundary and for locating and marking the Alaska boundary, made to be expended by the Secretary of State, are disbursed under my direction as commissioner by the disbursing agent of the Coast and Geodetic Survey as special disbursing officer for the Department of State.

A detailed description of the work of the year with maps illustrating its progress can be found in my annual report, which, as required by law, will be submitted to Congress in December.

Respectfully,

O. H. TITTMANN,
Superintendent.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

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REPORT

OF THE

DIRECTOR OF THE BUREAU OF STANDARDS

REPORT

OF THE

DIRECTOR OF BUREAU OF STANDARDS.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF STANDARDS,
Washington, July 1, 1907.

SIR: I have the honor to submit the following report of the work of the Bureau of Standards for the fiscal year ended June 30, 1907:

DIVISION I.—ELECTRICITY.

ELECTRICAL RESISTANCE AND ELECTROMOTIVE FORCE.

The work of this section includes the construction and verification of standards of resistance and electromotive force, the verification of resistance boxes, Wheatstone bridges, potentiometers, and other resistance apparatus, and the determination of the electrical conductivity, temperature coefficient, and thermoelectric properties of materials.

The investigation of standards of electromotive force, begun during the fiscal year in conjunction with the chemical division, has been continued. The necessary materials were subjected to various methods of purification, and, in addition, a special study was made of the methods of preparation of the mercurous sulphate, to which most of the irregularities previously observed are to be attributed. A large number of Clark and Weston cells, set up from time to time, have been under continuous observation, and the results obtained establish the high accuracy with which cells of both types can be reproduced. This is further shown by the close agreement of cells obtained by exchange from American investigators, and also from the English National Physical Laboratory and the Laboratoire Central d'Électricité of France, thus establishing the suitability of the standard cell as a primary electrical standard. In connection with this investigation a study has been made of the electrode equilibrium of the Clark and Weston standard cells. These investigations will be continued and extended and a redetermination of the temperature coefficients will be made.

A considerable amount of precision testing has been done by the section. This is necessitated by the extensive application of electrical methods to many classes of physical investigation.

INDUCTANCE AND CAPACITY AND ABSOLUTE MEASUREMENTS.

The extended investigation on the ratio of the electrical units, which occupied more than two years, was completed during the past year and the results have recently been published. This ratio is of

fundamental importance in electrical measurements, and this investigation has fixed its value much more exactly than before.

Investigations on the absolute measurement of current by means of current balances and on the silver coulometer were begun during the year and will be continued during the present fiscal year. These have to do with fixing more accurately the fundamental unit for the measurement of current.

An investigation into the absolute measurement of resistance by the inductance method has been undertaken, and a thorough study of the theory of the calculation of inductance from the dimensions of the coils has been made. The results of this study have been published in the Bulletin from time to time.

Further experimental investigations on the accurate measurement of inductance and capacity have been made, and important improvements in the construction of condensers as standards of electrical capacity have resulted from this work.

A very thorough study of resistance standards and of precision resistance apparatus with respect to changes in resistance due to atmospheric humidity was made during the year and methods devised for preventing these changes. This has resulted also in devising a new form of resistance standard which has proven to be very superior to the form now generally used. An extended study is now being made of a number of these new standards.

Condensers and inductances have been tested during the year for manufacturers, educational institutions, and the Government and advice and assistance given to manufacturers and others relative to the design of certain kinds of instruments and apparatus.

ELECTRICAL MEASURING INSTRUMENTS.

The testing of electrical measuring instruments during the year shows an increase over last year. More watt-hour meters were tested than any other class of instruments. Next in order were voltmeters and ammeters. Most of the watt-hour meters were tested in position in the District of Columbia, usually in cases of disagreement between supply company and consumer. Some were sent in by lighting companies to be tested for use as standard meters. A number of indicating watt-meters, single and polyphase; current shunts up to 5,000 amperes; current transformers, and potential transformers up to 11,000 volts were tested and certified. The determination of breakdown pressure for samples of rubber-covered and other insulated wires and of insulating paper and varnish was made, and other miscellaneous work was done.

A new instrument has been designed for the rapid and accurate calibration of voltmeters and has been put into service.

An investigation has been made with a view to the development of an electric heating device for special duty in an important branch of the Government service.

MAGNETISM.

The magnetic work of the year has included a thorough investigation of various methods of measuring the magnetic induction and permeability of iron and steel in its many forms, with reference both

to the accuracy and reproducibility of the measurements and the rapidity and convenience of the testing. This work led to an extended study of the methods of demagnetizing the specimens under test so as to bring them to a standard neutral condition magnetically, as it was found that comparatively small variations in the process of demagnetization made a considerable difference in the results obtained for the permeability. The results of this work will shortly be published.

A thorough study is also being made of the measurement of the hysteresis of iron and steel, particularly in the form of sheets as used in dynamos and transformers, and the development of accurate and convenient methods of testing specimens submitted by manufacturers. Two papers on this work will shortly be published.

PHOTOMETRY.

During the past year the cooperation of the Bureau was sought in an informal conference between Government engineers and manufacturers of electric incandescent lamps for the purpose of deciding upon suitable uniform specifications for the purchase of incandescent lamps by the Government. The specifications used previously by the various Departments were not uniform. As a result of the conference specifications were drawn up which have been adopted by most of the Departments, and a large number of copies, published in the form of a Bureau circular, have been distributed, upon request, to municipal officers and private companies.

The services of the Bureau were also extended to the committee on standardization of the American Gas Institute in conducting experiments on the suitability of the pentane lamp as a standard in the photometry of gas. In this connection a movement has been started by the Bureau looking toward the establishment of a single unit of candlepower throughout the United States in the photometry of all kinds of illuminants. Heretofore the candlepowers of gas and electric lamps have been expressed in terms of different "candles."

A great many tests have been conducted during the past year, including a large number of lamps for the Government Departments. An investigation of the relative properties of plain and frosted bulb lamps yield the explanations of the comparatively short life of frosted lamps—a fact which has been recognized for many years. A study of the possible errors incident to the various methods used in measuring incandescent lamps commercially suggested an improved method which has been found satisfactory.

Improvements and additions to the photometric equipment have been made during the year, including several new instruments which have been designed at the Bureau.

DIVISION II.—WEIGHTS AND MEASURES.

The third conference on weights and measures, held April last at the Bureau, was the most successful one thus far, both in point of attendance and in the amount and importance of the business transacted. Seventeen States were represented, and the delegates without exception manifested the greatest interest in the movement to bring

about improvements in the methods of inspecting weights and measures. The question of honest weights and measures in all business transactions is of practically the same importance as money and can only be guaranteed by proper governmental inspection. At present large sections of the country are without any inspection service whatever, and consequently the purchasing public, as well as honest merchants, are at the mercy of those unscrupulous enough to take advantage of the existing conditions. The conference outlined and recommended a model law for adoption by the States and also recommended that additional powers be given to the Bureau of Standards in order to make the State laws effective.

A platinum-iridium meter bar was purchased from the French Government and sent to Geneva, Switzerland, for graduation into millimeters. When this work is completed the bar will be sent to the International Bureau of Weights and Measures for investigation. This bar will complete the equipment of the Bureau for length standards of precision and render it possible to refer all length measurements to the national prototype meter without loss of accuracy on account of inferior secondary standards.

Considerable progress has been made in the construction of a comparator for standards of length with thermostatic regulation of temperature. Nickel-steel (Invar) for the microscope supports was obtained from France after many disappointing delays, due to the difficulty encountered by the manufacturers in rolling bars of the desired size. It is expected that the comparator will be completed during the coming year and that recomparison of the primary standards will be made, as well as a redetermination of their coefficients of expansion.

The calibration of the primary hydrometer standards was begun, and on account of the importance of the surface tension of the liquids in which such instruments are ordinarily used an investigation of a number of these liquids was undertaken. A method was developed for measuring the surface tension of the liquid at the moment a hydrometer is used. In this connection a special spring balance was devised and constructed at the Bureau for rapidly and accurately determining the density of the liquid in which the standard hydrometers are immersed. With this balance the variation of the surface tension with temperature of mineral oils of different densities was studied; also the surface tension of different mixtures of sulphuric acid and alcohol and of varying concentrations of sulphuric acid and water. Preliminary investigations of the surface tension of varying concentrations of sugar and water were also begun. In connection with the work an overflow cylinder was devised for readily securing fresh or noncontaminated surfaces on the liquids used. As contamination of the liquid surfaces is a fruitful source of error in the graduation and testing of hydrometers, it is proposed to recommend to manufacturers and users of hydrometers the use of such overflow cylinders.

An investigation of the effect of varying humidity in air on the apparent mass of standard weights is now being carried on, but the work has not progressed sufficiently to draw any reliable deductions from the results obtained to date.

In connection with the design of a standard mercury barometer experimental determinations of high precision were made of the capillary depression of mercury in tubes of from 11 to 40 millimeters

diameter for a certain definite surface tension, the result of the investigation showing that above 40 millimeters diameter the depression is so small as to be incapable of detection except by optical means. Preliminary measurements of the surface tension of soiled mercury surfaces were also made, with a view to determining the effect upon the capillary depression of such surfaces as are usually found in barometers. It appears from these investigations that the corrections usually employed for tubes of 20 millimeters and less are appreciably in error, because the maximum surface tension of mercury has been employed in calculating them. It is proposed to continue the investigation of the surface tension of mercury under conditions similar to those usually found in the mercury barometers and calculate from the results obtained the depression corresponding to a wide range of surface tensions and of tube diameters.

The routine work of the division has steadily increased, rendering it extremely difficult to give the necessary attention to a number of new problems of importance. A résumé of the tests made during the year is as follows: Length measures tested, 185; weights, 782; capacity measures, 2,177; barometers, hydrometers, and miscellaneous, 737; in all, 3,881.

The quality of the weights, measures, and measuring apparatus submitted for inspection and test shows a marked improvement over that of previous years.

DIVISION III.—THERMOMETRY, PYROMETRY, AND HEAT MEASUREMENTS.

The work carried out in this division during the year consisted in the testing of some 9,021 thermometers of various kinds, such as calorimetric and Beckman thermometers used in the determination of the calorific value of fuels, laboratory thermometers used for the precise measurement of temperatures up to 500° C. (930° F.), clinical thermometers used by the medical profession, maxima and minima thermometers, industrial thermometers for controlling the temperatures of technical processes, clinical standard thermometers used by manufacturers to control their product; 8 optical pyrometers, 35 thermocouples, 7 pyrometer galvanometers, and 5 platinum resistance thermometers, used for the measurement and control of high temperatures in metallurgical and other industrial operations and for special investigations in engineering laboratories. Other tests that have been made include the determination of the specific heat of amorphous silica, the freezing points of solutions, the fire-resisting properties of concrete, the calorific value of coal, the physical properties of oils, including the determination of flash points, viscosities, and setting points, and the calibration of a number of thermocouples for measurement of very low temperatures (—300° F.).

The 8,444 clinical thermometers tested were submitted by manufacturers, dealers, hospitals, physicians, and the several medical departments of the Government. About 5 per cent of the clinical thermometers tested failed to pass the test requirements, in comparison with 7.5 per cent for the year preceding. The Bureau has loaned to the manufacturers for brief periods certified working standards, which has resulted in a continued improvement in the quality of the product submitted for test.

The results of the investigation carried out on the proper methods of annealing high temperature mercurial thermometers used in industrial operations are evident in the continued improvement in the product submitted for test. The plans and specifications for the electric annealing furnace designed and constructed at the Bureau for the annealing of thermometers has been furnished to a number of manufacturers, several of whom have already installed a number of these furnaces, so that it is confidently expected that the average of the American product will at an early date be in every respect equal to the product that has hitherto been imported to meet the requirements of industrial work.

The investigations carried out on the measurement of high temperatures by means of the radiation emitted by incandescent bodies has directed attention to the availability of these methods in many industrial operations and has already led to the extensive use of optical and radiation pyrometers. A very considerable number of consulting engineers, representatives of industrial plants and of engineering laboratories, have visited the Bureau during the year for the purpose of studying methods of high temperature measurement and observing the operation of the various types of pyrometers in use in its laboratories. The information the Bureau has been able to place at the disposal of American manufacturers and engineers is an important feature of the work of this section.

The investigation on which is based the standard scale of temperature in the interval 0° to 100° C. has been completed during the year. As a result of this work the Bureau is now in possession of a number of carefully studied standards which will serve to reproduce the international hydrogen scale of temperature with the highest attainable precision. These standards were then applied to the calibration of several specially designed platinum resistance thermometers which were used to determine the transition temperature of sodium sulphate (32°.3840). As this point is now one of the most accurately known fixed points in thermometry, it will be of great service as a control point and for the standardization of resistance and calorimetric thermometers.

The great demands made on this division in testing has retarded progress on the important work incident to the establishment of the standard scale of temperature in the interval 100° to 500° C. Most of the apparatus has been designed and constructed, and considerable work has been done on the calibration of the standard thermometers to be used in this work.

The necessary apparatus for the determination of the specific heat of calcium chloride solutions (brine) has been constructed and assembled and some preliminary measurements have been made. The determination of this constant was undertaken at the request of the refrigeration industries, and as a result of the numerous inquiries addressed to the Bureau for information relating to this constant.

A low temperature thermometer comparator has been designed and constructed for the intercomparison of thermometers at temperatures down to —100° C.

A theoretical investigation on the establishment of the thermodynamic scale of temperature by means of the gas thermometer has been made. The facilities now available in the way of liquid air, liquid

hydrogen, compressed gases, electrical energy, and apparatus especially designed for the measurement of small temperature differences with the highest attainable accuracy impose upon the Bureau the imperative duty of repeating and extending the classical experiments of Thomson and Joule on the free expansion of gases—work which is fundamental to the whole conception of temperature.

The first portion of the work on the melting points of palladium and platinum was completed during the year. These constants are of great importance, since they serve as standard points of reference for the high temperature scale. Recent work here and abroad has called into question the entire high temperature scale, and it is of the utmost importance that further work be done on its establishment. It is also necessary to redetermine the fixed points of the lower range of the high temperature scale by means of a standard gas thermometer and to extend this scale to the highest attainable temperatures by the several radiation laws.

The introduction of metal filament lamps having a very greatly increased efficiency over the carbon filament lamps now in use has led to numerous investigations as to the cause of the great gain in efficiency, i. e., whether it is to be attributed to selective radiation or a higher working temperature of the metal filaments. An investigation on the temperature and selective radiation of carbon, tantalum, tungsten, and osmium lamps has shown that to a great extent the marked gain in efficiency over the carbon filament lamps is due to a higher working temperature at which the metal filaments can be used.

A new radiation method of measuring the melting points of the elements, especially applicable where only minute quantities are available, has been applied to the metals of the iron group and the results will be published in a forthcoming Bulletin.

The demands on the limited working force of this division in the matter of routine testing has grown to such an extent as to seriously interfere with important lines of work relating to the establishment of our standards with that precision which is rightfully demanded of us by the scientific and technical world.

DIVISION IV.—OPTICS.

SPECTROSCOPY.

The preliminary investigation of pure light sources has been concluded, and sources suitable for use in polarimetry, interferometry, reference standards of wave length, and for absolute length standards have been selected and recommended. In this work nearly all of the available spectrum lines, numbering several hundred, were examined. The theory of spectral homogeneity was developed mathematically and the requirements of light sources for different purposes briefly outlined.

The luminous equivalent of radiation, or the specific relation of light to radiant energy, has been carefully examined theoretically in the light of the best data on visual sensibility of physical instruments, with a view to applications to commercial photometry, pyrometry, polarimetry, spectroscopy, and other similar work.

The luminous properties of conducting helium gas have been investigated experimentally with a view to the determination of its value as a primary standard of light intensity. The light from conducting helium was found to be very constant and free from external influences, but of a color not the most desirable for photometric precision.

Such tests of materials and measuring instruments as depend upon spectroscopic measurements have been made by this section.

RADIOMETRY.

Radiometry interests itself mainly with various problems in emission, absorption, and reflection spectra, particularly in the infra-red. The most recent completed work in this line is (1) a study of the radiation from a thermopile at room temperature to a complete radiator which is at the temperature of liquid air, (2) an examination of the infra-red reflection spectra of two groups of minerals (oxides and sulphides) not heretofore studied, and (3) a search for bands of selective reflection, "residual rays," in the extreme infra-red. The discovery of substances having such bands of selective reflection is of importance in extending the researches of Rubens and Kurlbaum on the radiation laws of a complete radiator at various temperatures.

While these subsidiary investigations have been in progress apparatus has been assembled for studying the radiation laws of a complete radiator (so-called "black body"), which must be done with improved apparatus and with more attention given to the measurement of the temperature of the radiator and to the adjustments of the apparatus than has been done in the past. Preliminary measurements of the uniformity of the temperature distribution of the radiator are now in progress, and it is a matter of but a short time when regular observations will be made on the "constants" in the radiation laws established by Wien and by Planck.

A study of the efficiencies of several radiation meters, including the bolometer, the radiometer, the radiomicrometer, and the thermopile, has been completed. The subject is treated historically as well as experimentally, and an attempt is made to rate each instrument as to its reliability and adaptability for particular kinds of work.

POLARIMETRY.

At the request of the Secretary of the Treasury the Bureau has made many recommendations relative to changes in the scientific methods employed in the customs laboratories, and a large amount of work preliminary to the introduction of these changes has been done.

An accurate determination of the effect of basic lead acetate, the clarifying reagent, on sucrose has been completed. The results show an unexpected lowering of the test of the sugar when there is a slight excess of the reagent and an increase when a considerable excess of the reagent is present. An effort is being made to discover a reagent free from this defect.

It is of the utmost importance that the methods of testing raw sugar at the different ports of entry be uniform. In view of this fact it was found necessary to make a careful investigation of the effects of the widely varying atmospheric conditions on such tests. This

investigation is now being carried on and has resulted in correcting several obscure sources of error.

The determination of the 100° (sugar) point on the saccharimeter scale involves the preparation of chemically pure sugar, and it has accordingly been found necessary to defer that determination until an exhaustive study can be made of sucrose prepared by different methods. This investigation is well under way and promises to develop a method whereby chemically pure sugar may be prepared at the Bureau in quantities sufficient for purposes of testing and investigation.

Ordinary polariscopes for sugar testing do not permit of variable sensibility, i. e., they can not be adjusted to give the best results on widely varying sugars. A polariscope has been devised which overcomes this and other defects, and is now being constructed by the makers of such apparatus.

During the year certificates were issued for eleven quartz plates, submitted by the general public, and 1,202 samples of sugar were tested.

DIVISION V.—CHEMISTRY.

During the year determinations of the combining ratios of hydrogen and oxygen and of hydrogen and chlorine have been practically completed. In conjunction with the latter a new method of preparing chloroplatinic acid was devised.

In the preceding year the Bureau undertook, in cooperation with the American Chemical Society, to investigate and revise the methods of testing for and determining small amounts of impurities in the more important analytical chemicals and to work out appropriate specifications. During the year an accurate method for determining minute traces of iron in chemicals was worked out, and work on a colorimetric method of determining traces of bromine, iodine, and sulphuric acid was begun, but had to be interrupted when well under way, owing to the increasing demands on the force of the division in other directions. The importance of work of this nature is very considerable, for not only does the accuracy of chemical analysis depend largely on the purity of the reagents employed, but determinations of the physical constants of matter, as electrical conductivity, melting points, atomic weights, etc., require material of exceptional purity, a condition which can in general be secured or determined only by chemical means. This work has therefore an important bearing on other problems of the Bureau and should be resumed as soon as possible.

An investigation of the methods of analysis of adhesive gums has been begun in connection with the testing of Government supplies.

The Bureau is constantly called on to furnish samples of materials of accurately known composition, among them irons and steels of various grades, alloys, iron ores, copper slags, etc. These afford to the chemist a valuable means of checking results and eliminating errors in his work. In response to this demand the division undertook the preparation of a series of seventeen accurately analyzed standard steel samples, from material furnished by the Association of American Steel Manufacturers, and of these three were completed and their distribution begun during the year. The demand for

these, as well as the standard cast irons, has shown a gratifying increase. Inquiries have also begun looking toward supplying similar standard alloy steels, the industrial importance of which is rapidly increasing. The preparation of further standard analyzed materials is very desirable.

In cooperation with the committee on technical analysis of the American Chemical Society a sample of phosphate rock was carefully analyzed, with the object of throwing light on the accuracy of the analytical methods employed and of supplying a standard analyzed material.

Further work has been done in the way of experimenting with different methods of preparing materials used in the construction of standards of electromotive force, with the result that a much higher degree of uniformity has been reached.

Beginning with March, there has been an unusual increase in the testing work of the division, due largely to the demand for testing paper in connection with Government contracts and purchases. Several hundred samples of paper have been analyzed chemically, in conjunction with physical and microscopic tests, and this work has absorbed much of the time of the force. It has been the effort of the division to report tests with the greatest possible promptness, in order not to delay pending contracts or the use of the material in question. With the limited force of the division this could only be done by interrupting or even indefinitely postponing other important work.

Samples of paints, oils, ink, mucilage, and silk have also been analyzed for this and other Government Departments, in connection with the purchase of materials. The value of this work is shown by the fact that the materials examined frequently deviate widely from the specifications, or are of inferior quality, a fact which could only have been determined by testing.

While the increasing recognition of the importance of carefully examining supplies purchased by the Government is very gratifying and will lead to the use of better materials and the saving of money, other investigations which have an immediate bearing on practical questions connected with the manufacture and use of materials should be continued. Specifications are frequently very imperfect, and the methods of testing are often far from satisfactory. These can not be improved except through chemical and other scientific and practical investigations. The time and cost required to make these is usually trivial when compared with the continuous saving which would result to the Government and others, yet to carry them out is possible only with the aid of increased facilities sufficient to handle the required testing with promptness.

ENGINEERING INSTRUMENTS.

The tests and investigations in connection with engineering instruments have included water meters, gas meters and gas-meter provers, pressure and vacuum gauges, and anemometers. An open mercury manometer has been installed for the careful study of gauges of low range, especially those used on paper-testing apparatus. The range will be extended within a short time to include gauges up to 500 pounds per square inch.

An improvement has been made in the apparatus for testing anemometers and the range increased to 2,300 feet per minute. A careful study has also been made of the effects of air drag and the adjacent walls of the room upon the accuracy of the method of testing anemometers.

Work upon the comparison and development of standard methods and instruments for the calibration of gas meters, water meters, and other engineering instruments and a comparative study of the various types now on the market has been delayed on account of the great amount of testing to be done.

The rapidly increasing demands for the careful study and calibration of engineering instruments warrants a considerable extension of this work. The requests for accurate data and tests have far exceeded the facilities and assistance available, and it has been necessary to limit the work to what has appeared to be the most urgent and important cases.

PROPERTIES OF MATERIALS.

During the year the Bureau has met with an unprecedented demand for information concerning and the testing of the properties of materials, which includes engineering, construction, and other materials ordinarily purchased according to specifications. These requests have been made principally by the various bureaus of the Government service and are due to the rapidly increasing desire on the part of the purchasing agents and other officials to purchase all such materials according to proper specifications and to insure conformity with such specifications by suitable tests of the articles delivered. For many materials no satisfactory methods of testing or measuring instruments are available, and these must be developed by the Bureau before the required information can be furnished. Furthermore, the development of instruments and methods for the testing of all such materials and the experience that is gained in testing them in connection with the Government purchases are sources of valuable information for the manufacturer and user of these materials. The materials tested thus far include the usual tests of steel, iron, concrete, cement, cement mortar, brick, paper, and textile fabrics.

Repeated requests have been received from a number of the Government Departments for assistance in the analysis of and specifications for their paper supply. These requests became so urgent that the subject was taken up, and the Bureau is now rendering them assistance daily, especially in connection with the purchase of paper by the Government Printing Office and the Post-Office Department.

For several years the textile industries have urged the Bureau to take up important questions pertaining to the textile industry. It has been impossible to respond to these requests on account of the lack of facilities. However, the testing of textiles in connection with Government purchases will necessitate the solution of many of these problems, the results of which may be placed at the disposal of the manufacturer as well. The equipment for determining the physical properties of textile materials is being developed. Tests have been made on silk, cotton, and linen fabrics, and twine.

The relation of the physical and chemical properties of lubricating oils to their value as lubricants is a problem which must be solved

before suitable specifications and tests can be made. The Bureau has made considerable progress in this direction and contemplates an investigation of the physical and chemical methods that are now in use for the purpose of testing lubricating oils.

A large number of miscellaneous materials have been examined, principally in connection with Government purchases, to ascertain their composition and whether or not they were in accordance with specifications. In many of these cases methods of testing must be perfected, and information regarding these materials is acquired which will prove of great value to the producer and the consumer, thus bringing about better conditions under which such materials are bought and sold.

PERSONNEL.

The personnel of the Bureau may be classed in three groups. The first has to do with the scientific work of the Bureau, the second with the office and clerical work, and the third with the operation of the mechanical plant, the construction of apparatus, and the care of the buildings and grounds. The plan of organization in each of these groups involves a regular gradation of salaries, in order that faithful and efficient service may be rewarded by promotion when vacancies occur.

The staff of the Bureau, including the Director, consists of 110 persons, distributed as follows:

Scientific force.—One physicist, 1 chemist, 6 associate physicists, 1 associate chemist, 16 assistant physicists, 3 assistant chemists, 19 laboratory assistants, 5 aids, and 7 laboratory apprentices; total, 59.

Office and clerical force.—One secretary, 1 librarian, 9 clerks, 1 storekeeper, 1 draftsman, 2 assistant messengers, 4 messenger boys; total, 19.

Engineer and mechanical force.—One engineer, 4 assistant engineers, 1 electrician, 7 mechanicians, 1 woodworker, 3 skilled laborers, 3 firemen, 1 elevator boy, 4 laborers, 2 watchmen, 2 janitors, 2 charwomen; total, 31.

LIBRARY.

The library contains 3,474 bound volumes, in good condition, carefully classified, and catalogued. The increase during the past year was 1,041, nearly all of which were acquired by purchase. The library has also a considerable number of reprints, pamphlets, and unbound reports, the total number of which is probably 1,500. These pamphlets contain some very valuable material; the work of classifying and cataloguing them is now in progress.

The circulation of the library during the year was about 4,500, and in addition about 900 books were drawn from other Government libraries. Through the courtesy of the Coast and Geodetic Survey the Bureau has had the use of sets of Wiedmann's Annalen and the Philosophical Magazine. The privileges of the other scientific libraries of Washington have greatly added to the resources of the technical literature at the disposal of the Bureau.

PUBLICATIONS.

The following publications were issued by the Bureau during the year:

Circular No. 12, concerning the verification of polariscopic apparatus and auxiliary instruments.

Circular No. 13, in regard to the adoption of standard specifications for the purchase of carbon-filament incandescent lamps. The specifications adopted were also separately printed as a blank form for the use of Government Departments and the general public.

A report of the proceedings of the second annual conference on the weights and measures of the United States.

The results of the scientific work of the Bureau were published in 31 technical papers.

SUMMARY OF TESTS.

In connection with the work of the Bureau a certain amount of testing of standards and standard measuring instruments is done. The tests completed during the fiscal year are shown in the following table. In case the testing is done for parties other than the Government, fees are charged as provided for by law. For comparison, the corresponding amounts are also indicated for Government tests.

NUMBER AND VALUE OF TESTS COMPLETED DURING FISCAL YEAR ENDED JUNE 30, 1907.

Nature of test.	For Government.		For public.		Total.	
	Number.	Value.	Number.	Value.	Number.	Value.
Length	82	$243.40	103	$224.25	185	$467.65
Mass	275	140.50	507	294.05	782	434.55
Capacity	1,630	661.45	547	288.65	2,177	950.10
Temperature	740	382.92	8,459	1,523.52	9,199	1,906.44
Optical	1,197	1,203.00	17	35.50	1,214	1,238.50
Engineering	425	1,596.40	47	95.00	472	1,691.40
Electrical	131	386.70	175	541.85	306	928.55
Photometry	2,016	1,019.20	72	37.80	2,088	1,057.00
Chemical	362	1,247.86	447	748.29	809	1,996.15
Miscellaneous	728	583.75	9	6.50	737	590.25
Total	7,586	7,465.18	10,383	3,795.41	17,969	11,260.59

The receipts for tests were as follows:

Total receipts, 1906–7		$3,609.11	
Returned for canceled test, submitted and paid in previous year	$5.00		
Received prior to July 1, 1906, for tests completed in fiscal year 1906–7	276.18		
Due for outstanding tests	5.65		
		286.83	
			$3,895.94
Received for tests completed in fiscal year 1905–6		38.23	
Received for tests in progress at close of fiscal year 1906–7		62.30	
			100.53
Fees for tests completed, 1906–7			3,795.41

FINANCIAL STATEMENT.

The following statement shows the amount and object of each appropriation provided for the Bureau for the fiscal year 1907, the disbursement during the year, the amount of unfilled and unpaid orders at the close of the year, and the unexpended balance remaining at the close of business June 30, 1907:

FISCAL YEAR ENDED JUNE 30, 1907.

Appropriation.	Total appropriation.	Disbursement.	Liability.	Balance.
Salaries	$111,440.00	$108,399.59		$3,040.41
Equipment	41,000.00	35,225.80	$5,549.15	225.05
General expenses	15,000.00	13,895.74	886.42	217.84
Grounds	3,000.00	3,000.00		
Do.[a]	1,000.00	509.87	335.30	154.83
Total	171,440.00	161,031.00	6,770.87	3,638.13

[a] Made immediately available.

The following statement shows the condition of the appropriations for the two preceding fiscal years at the close of business June 30, 1907:

FISCAL YEAR ENDED JUNE 30, 1905.

Appropriation.	Total appropriation.	Disbursement.	Liability.	Balance.
Salaries	$85,780.00	$83,932.44		$1,847.56
Equipment	78,500.00	78,500.00		
General expenses	13,250.00	13,176.29		73.71
Grounds	1,000.00	1,000.00		
Outbuildings	15.90	15.90		
Total	178,545.90	176,624.63		1,921.27

FISCAL YEAR ENDED JUNE 30, 1906.

Salaries	$99,660.00	$95,727.45		$3,932.55
Equipment	41,000.00	40,678.01	$70.08	251.91
General expenses	12,500.00	11,889.61		610.39
Grounds	1,500.00	1,499.37		.63
Outbuildings	12,484.10	12,472.09		12.01
Total	167,144.10	162,266.53	70.08	4,807.49

BUILDINGS AND GROUNDS.

The improvement of the grounds and the construction of roads has progressed slowly, but satisfactorily. No attempt has been made to do more than put the grounds in a condition satisfactory to the needs of the Bureau.

The site of the Bureau should be extended to the streets on the north and south and two or three hundred feet farther east, before building is begun in the neighborhood. Furthermore, the lowering of the grade on Connecticut avenue at its junction with Pierce Mill road has made the grade of the latter street so steep that it will be

necessary to provide another entrance to the Bureau's grounds as soon as possible. This will be accomplished by the extension of the site to the street on the north.

Additional laboratory space is urgently needed for the testing of materials. The extraordinary growth of this work has seriously interfered with that in connection with standards and measuring instruments. Nevertheless, its importance has been such as to warrant considerable sacrifice on the part of the Bureau in order to comply with some of the more important demands for assistance. Should Congress make provision for this additional space during the coming session, it will then be at least two years before it would be available. What to do with this work in the meantime is one of the most serious problems the Bureau has met with.

INSTRUMENT SHOP.

The character and quantity of the work done at the Bureau is influenced largely by the facilities possessed for the construction of the special apparatus involved in all investigations. In every branch of testing new and improved apparatus must be designed and constructed in order to increase the accuracy or reduce the cost. The instrument shop, while well equipped with machines and provided with several excellent workmen, can not meet the demands of the Bureau for its service. It is hoped that additional space and equipment may be provided for it in the near future.

Respectfully,

S. W. STRATTON,
Director.

To Hon. OSCAR S. STRAUS,
Secretary of Commerce and Labor.

INDEX.

Page.

Accidents, steamboat, etc..... 320, 365
Accommodations. *See* Building.
Advertising for immigrants..... 12-15, 140
Ages of immigrants..... 80, 82
Aids to navigation..... 47, 467, 488
Alaska, fur-seal service..... 52
salmon fisheries..... 50, 643
surveys..... 651
Albatross, explorations and surveys.. 50, 640, 644
Aliens. *See* Immigration.
Allotment notes, seamen's..... 301
Angel Island, needs and facilities..... 153
Appeals, Chinese..... 171, 173
rejected aliens..... 132
Appointment Division, review of activities. 59
Appropriations. *See* Financial statement.
Aquarium, new public, recommended..... 51, 646
Arrests of Chinese illegally resident..... 171, 173
Austin, O. P. (Chief, Bureau of Statistics), report..... 233
Automatic buoys, light-ship..... 46

Baltimore, immigration quarters..... 153, 160
Barges, certificates of inspection issued.... 316
Biological inquiries, fisheries..... 49, 638
Blue Book, compilation and publication... 37, 273
Board. *See* Inspectors; Light-House Board.
Boards of trade, cooperation with..... 6, 34, 250
Boilers, inspections of Government..... 456
plates tested..... 318
See also Inspectors.
Boots and shoes, investigation of markets. 34, 247
Boston, facilities, needs, and activities at immigration station..... 152, 160
Bowers, George M. (Commissioner of Fisheries), report..... 633
Boycott, Chinese..... 16-17
Braun, Marcus (immigrant inspector), reports..... 147, 184
Bridges, lighting..... 488
Brussels Conference, adherences..... 43, 307
Building, additional, for Census Bureau... 38, 278
necessity for Department..... 68
new, for Fisheries Bureau..... 51, 646
Bulkheads, present ineffective requirements 337
Bulletins, Bureau of Labor, contents..... 28
Buoyage, appropriation required..... 478
Buoys, light-ship, automatic..... 46
Bureau. *See* name of bureau.

Campbell, Richard K. (Chief, Division of Naturalization), report..... 187
Canada, citizens debarred..... 89
conditions along border..... 145, 158, 183
report of immigration commissioner.... 158

Page.

Cape Henry, buoys located at..... 46
Carson, John M. (Chief, Bureau of Manufactures), report..... 243
Casualties, violations of law, and investigations under Steamboat-Inspection Service..... 320, 365
Census Bureau, report..... 263
Secretary's review of activities..... 36
Census of 1790, republication..... 37, 271
Census of 1910, preparatory work..... 38, 275
Certificates of inspection issued by Steamboat-Inspection Service..... 316
to foreign vessels..... 316, 462
Certificates of naturalization, canceled..... 196
issued and denied..... 193
Chamberlain, Eugene Tyler (Commissioner of Navigation), report..... 285
Chambers of commerce, cooperation with 6, 34, 250
Charleston, needs and facilities of immigration station..... 153
Chief, Manufactures Bureau, report..... 243
Chief, Naturalization Division, report..... 187
Chief, Statistics Bureau, report..... 233
Child labor, census report..... 36, 265, 266
investigation by Labor Bureau..... 25, 219
Chinese-exclusion laws, administration and discussion..... 163
Canadian and Mexican border conditions..... 183
domiciled laborers..... 176
domiciled merchants, and their wives and minor children..... 175
native-born..... 180
proposed certificates of identification to admitted members of exempt classes.. 178
proposed registration..... 177
recommendations..... 200, 204
reports of inspectors in charge..... 186
Secretary's views..... 15
"section 6" exempt classes..... 174
statistical tables..... 167
transits and seamen..... 182
Cities, census statistics..... 36, 265, 266
Civil-service statistics, compilation..... 37
Clerical labor, cost-keeping, in Census Bureau..... 37, 274
situation in Census Bureau..... 264
Clerks of courts, increased fees for naturalization service recommended..... 21-22, 198
Coast and Geodetic Survey, report..... 647
Secretary's review of activities..... 53
Coast line of United States, extent..... 485
Collisions at sea, adherences to Brussels Conference..... 43, 307
amendments to rules to prevent..... 303
Color-blindness, examinations..... 320

Page.

Commerce. *See* Manufactures Bureau; Statistics Bureau.
Commercial bodies, cooperation with.... 6, 34, 250
"Commercial Relations," discontinuance recommended..... 258
Commissioner of Corporations, report..... 209
Commissioner of Fisheries, report..... 633
Commissioner of Labor, report..... 215
Commissioner of Navigation, report..... 285
Commissioner-General of Immigration, report..... 77
Commissioners of immigration, reports.... 154
Committee on statistical reorganization... 67
Committee to review passenger act..... 43
Common carriers, mediation under Erdman Act..... 26
Conferences of bureau chiefs..... 6, 71
Consular officers. *See* Diplomatic and consular officers.
Consular and Trade Reports, information supplied through..... 35
Contract laborers, enforcement of law concerning alien..... 141
Secretary's views..... 12
See also Debarred aliens.
Cooperation with commercial bodies.... 6, 34, 250
Corporations Bureau, report..... 209
Secretary's review of activities..... 22
Cost accounting in Census Bureau..... 37, 274
Cotton, production, distribution, and consumption..... 36, 268
Cotton goods and cotton-seed products, investigation of markets..... 33, 244, 246
Countries, immigration by..... 80, 91, 95, 112, 116, 118, 133
nonimmigrant aliens admitted by..... 120
Crew on vessel, defective requirements..... 336
Criminal judicial statistics, compilation... 36, 267

Debarred aliens, number, causes, etc..... 10, 81, 84, 88, 89, 123
Chinese..... 169-170
See also Deportations of aliens.
Debt, wealth, and taxation, census report. 36, 265
Decks of vessels, jurisdiction over..... 183
Declarations of intention filed..... 190
Department, bureaus constituting..... 5
Deportations of aliens, number, causes, etc. 81, 84, 86, 88
Chinese..... 168-170, 173
See also Debarred aliens.
Deserting alien seamen..... 131, 132, 182
Destinations of immigrants..... 96, 106
Destinations of nonimmigrant aliens admitted..... 120
Diamond Shoal, light-house and fog signal. 475
Diplomatic and consular officers, exemptions from immigration laws and regulations..... 8
Director, Standards Bureau, report..... 659
Director of the Census, report..... 263
Disasters to steamboats, etc..... 320, 365
Disbursements Division, work..... 60
Distribution of food fishes..... 47, 633
Distribution of immigrants..... 9, 78, 139
Division. *See* name of division.
Divorce statistics, compilation..... 36, 266

Page.

Electrical industries, compilation of statistics..... 37, 268
Ellis Island, conditions, needs, and activities at..... 150, 154
Engineers, light-house..... 465
Erdman Act, mediation under..... 26
Examiners, naturalization, recommended. 21, 197
Excluded, immigrants. *See* Debarred; Deportations.
Executive civil-service statistics, compilation..... 37
Expatriation, United States doctrine..... 11
Expenditures. *See* Financial statement.
Exports. *See* Manufactures Bureau; Statistics Bureau.
Expositions, trade advantages offered by international..... 255
Express business statistics, compilation... 36, 268

Fees, increase in naturalization, recommended..... 21-22, 198
Financial condition of immigrants..... 80, 82
Financial statement, Census Bureau..... 263, 280
Coast and Geodetic Survey..... 655
Department, by bureaus, offices, and services..... 60
Department printing..... 66
Fisheries Bureau..... 645
Immigration Service..... 161
Light-House Establishment..... 467, 491
Naturalization Service..... 199
Standards Bureau..... 671, 672
Steamboat-Inspection Service..... 314
Fines, penalties, and forfeitures, applications for mitigation or remission of navigation..... 304
Fines of steamship companies..... 136
First Census, republication..... 37, 271
Fish hatcheries, new stations, improvements, and personnel..... 637
output and distribution..... 47, 633
Fish Hawk (Fisheries Bureau steamer), movements..... 644
Fisheries, census statistics..... 36, 268
notes on important..... 641
Fisheries Bureau, disbursing office abolished 65
report..... 633
Secretary's review of activities..... 47
Fishing vessels, lights and signals..... 303
Fog signals, appropriation required for.... 479
submarine..... 490
Food fishes, propagation and distribution. 47, 633
Foreign ports, stationing immigrant officers at..... 11
Foreign vessels, inspections..... 316, 462
Fur-Seal Service, Alaskan..... 52

Galveston, needs and facilities of immigration station..... 153
Gas buoys, light-ship automatic..... 46
Gedney Channel, buoys located off..... 46
Germany, cooperation with commercial bodies..... 6, 34, 250
Grampus (Fisheries Bureau schooner), movements..... 644
Great Lakes, output of shipyards..... 38, 285
Guam, light-house establishment..... 611

Page.

Harris, Ira (supervising inspector, Second district), report on motor boats in Second supervising inspection district..... 324
Hatcheries. *See* Fish hatcheries.
Hawaii, light-house establishment..... 484, 607
local steamboat inspectors for..... 336
Herring fisheries of Newfoundland..... 51, 642, 645
Honolulu, facilities and needs of immigration station..... 154
Hospital treatment of aliens..... 81, 84
Hulls and boilers, inspectors. *See* Inspectors.
Hulls of Government vessels, inspections... 461

Illiteracy. *See* Literacy.
Illuminant, incandescent oil vapor..... 46, 509
Immigrant fund, receipts and expenditures. 161
Immigrants, contract-labor..... 12, 141
distribution..... 9, 78, 139
exclusions and rejections..... 10
See also Debarred aliens.
physical and mental condition..... 136
Immigration, amendments to laws, recommended..... 200, 203
facilities and needs of stations..... 10, 150, 154
inducements by States..... 12-15, 140
insular and mainland, contrasted..... 19
international conference, views of Commissioner-General of Immigration..... 135
views of Secretary..... 11
reports of commissioners and inspectors in charge..... 154
sources and inducements..... 134
statistical tables..... 78
See also Chinese-exclusion laws.
Immigration and Naturalization, report of Bureau..... 77
Secretary's review of subject..... 7
Immigration Commission..... 78
Immigration officers, stationing abroad.... 11
Imports. *See* Manufactures Bureau; Statistics Bureau.
Incandescent oil vapor as an illuminant... 46, 509
Indian Territory, census of population.... 37, 272
Inducements to immigration..... 12-15, 134, 140
Information Division, establishment..... 9, 139
Inspection certificates. *See* Certificates of inspection.
Inspectors, creation of new boards of local steamboat..... 336
detail of assistant steamboat..... 337
light-house..... 465
meeting of board of supervising..... 337
reinspections of passenger vessels..... 337
statistical summary of work of steamboat..... 340
reports of immigrant..... 154
See also Steamboat-Inspection Service.
Insular and mainland immigration contrasted..... 19
Insular possessions, aids to navigation..... 47
See also Noncontiguous territory.
Intention, declarations of, filed..... 190
International conference on immigration, views of Commissioner-General of Immigration..... 135

Page.

International conference on immigration, views of Secretary..... 11
Interstate commerce law, effect on Fisheries Bureau..... 49, 636
Inward passenger movement..... 123

Jamestown Exposition, exhibit of Fisheries Bureau..... 644
Japanese, arrivals in Continental United States..... 149-150
fur-seal fishing..... 52
Judicial statistics, gathering criminal..... 36, 267

Labor Bureau, report..... 215
Secretary's review of activities..... 25
Laborers. *See* Chinese-exclusion laws; Contract laborers; Skilled labor.
Larchmont (vessel) disaster..... 321
Leather and its manufactures, investigation of markets..... 34, 247
Licensed officers, licenses issued..... 317, 319
number required on vessels..... 336
Life-preservers inspected..... 319
Light-House Board, disposition of proceeds from sales and leases of property..... 489
new works authorized..... 475
officers and members..... 465
report..... 467
Secretary's review of activities..... 45
Light-house districts, increase recommended..... 46, 485
summary of work and needs..... 494
Light-house tender, standard model adopted..... 45
Light-houses, repairs..... 477
Light-keepers, dwellings for..... 483
increase in number and pay recommended..... 46, 477
Light stations, appropriations required.... 475
Light vessels, appropriations required..... 478
list and description of commissioned.... 481
recommendations concerning..... 480
standard model adopted..... 45
Literacy of immigrants..... 80, 82
Lives lost in steamboat, etc., accidents.... 320, 365
Local inspectors. *See* Inspectors.
Lumber cut, statistics of annual..... 267

Mail subsidies, discussion of ocean..... 38-43, 295
Manufactures, census report..... 36, 265
Manufactures Bureau, cooperation with commercial bodies..... 6, 34, 250
report..... 243
Secretary's review of activities..... 33
Marine biological laboratories, work..... 50, 639
Marine boiler plates tested..... 318
Markets, investigation of foreign. *See* Manufactures Bureau.
Marriage statistics, compilation..... 36, 266
Measures, uniformity in commercial weights and..... 56, 661
Mediation under Erdman Act..... 26
Mental condition of alien arrivals..... 136
Merchant marine, discussion by Secretary... 38
discussion, recommendations, and statistics..... 285
Mexico, citizens debarred..... 89
conditions along border..... 145, 183